



Utah  
Department of Health

**Bureau of Chemical  
and Environmental Services  
CLIENT MANUAL**

Produced March 2005

**State of Utah Public Health Laboratory**  
**46 North Medical Drive**  
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**<http://health.utah.gov/els/envsrv>**

## **Bureau of Chemical and Environmental Services - Client Manual**

State of Utah Public Health Laboratory

### **INTRODUCTION**

## **BUREAU OF CHEMICAL AND ENVIRONMENTAL SERVICES**

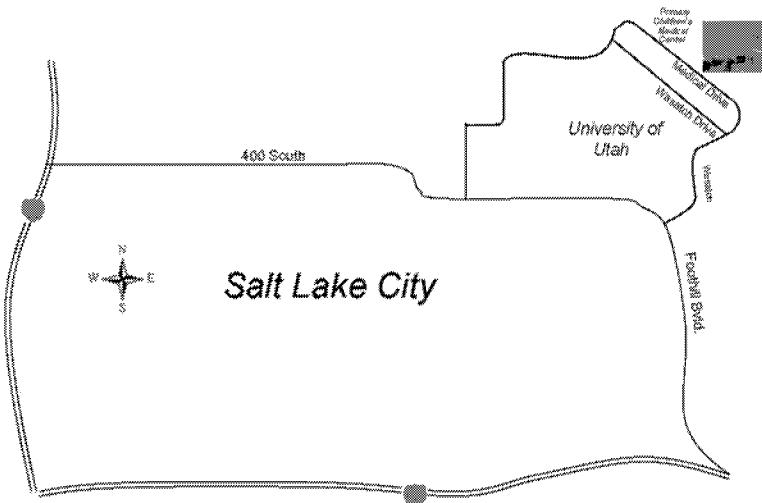
The bureau is responsible for receiving and sample testing of chemical and environmental microbial contaminants in drinking water, waste water, and hazardous waste. Testing is done to assure compliance with health and safety standards established by EPA and the Department of Environmental Quality (DEQ). Services are provided to Utah DEQ, public utilities, local health departments, other state and federal agencies. The bureau also maintains emergency response capabilities.

## **USE OF THIS CLIENT MANUAL**

This manual is designed to provide a resource for sample collection and available testing information. Its contents are not be used for regulatory purposes other than providing proper sample collection and preservation information. If you have any questions, please contact Jack Oman at 801-584-8400.

## **DIRECTIONS FOR HAND DELIVERY OF SAMPLES**

The laboratory is located east of University of Utah next to Primary Children's Medical Center in Salt Lake City (see map below). Our normal hours of operation are 8:00 AM to 5:00 PM, Monday through Friday, except holidays. The environmental sample receiving desk is located on the northeast corner of the 1<sup>st</sup> floor.



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### ORGANIC CHEMISTRY

Name: **Haloacetic Acids (HAA)**

Test Code: **6251B-HAA**



Grouping: **Disinfection By-Products**

Application: Water systems using chlorine or bromine for disinfection.

Analytes: Dibromoacetic acid

Dichloroacetic acid

Monobromoacetic acid

Monochloroacetic acid

Trichloroacetic acid

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill vials to top of container, be sure not to over fill to prevent loss of preservative. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

3/40 mL vials

Preservative and Handling:

65 mg NH<sub>4</sub>Cl, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 14 days to extract and 7 days to analyze

Method Technology:

Liquid-liquid extraction followed by GC detection

Name: **Trihalomethanes (THM)**

Test Code: **524.2-THM**



Grouping: **Disinfection By-Products**

Application: Water systems using chlorine or bromine for disinfection.

Analytes: Bromodichloromethane

Bromoform

Chlorodibromomethane

Chloroform

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill vials to top of container, be sure not to over fill to prevent loss of preservative. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

3/40 mL vials

Preservative and Handling:

4 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 14 days

Method Technology:

Purge and trap technique followed by GCMS detection

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### ORGANIC CHEMISTRY

Name: **Volatile Organic Compounds (VOCs)**

Test Codes: **524.2-VOC** , **624-VOC** or **8260-VOC**



For lists of analytes see Program Specific Indexes



Clean Water Act (CWA).....page 42

Resource Conservation and Recovery Act (RCRA).....page 49

Safe Drinking Water Act (SWDA).....page 58



**NOTE:** Prior to collection of 624 or 8260 samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures

Instructions for Collection:

**Caution:** For surface waters and hazardous samples, check to see if HCl preservative reacts with source water (foams, effervesces, etc.) If reacts, do not add HCl. For all others, fill vials with sample source to top of container. Add 2 drops HCl acid to each vial, more drops needed if highly buffered source. Be sure not to over fill to prevent loss of preservative. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Drinking Water – 3/40mL vials, plus 1 trip blank

Surface Water – 4/40 mL, plus 1 trip blank

\*must use 4/40 mL vials—special prepared for chlorinated sites

Hazardous Water – 4/40 mL vials, plus 1 trip blank

\*must use 4/40 mL vials—special prepared for chlorinated sites

Hazardous Soil – 4 oz. glass container with Teflon-lined lid

Drinking Water – 25 mg ascorbic acid, HCl to pH <2

Surface Water – 10 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> for chlorinated sites

Hazardous Water – 10 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> for chlorinated sites

All sample types, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 14 days, except Soil 14 days to extract and 14 days to analyze

Purge and trap technique followed by GCMS detection

Required Containers/Volume:

Preservative and Handling:

Method Technology:

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**ORGANIC CHEMISTRY**

Name: **Pesticides and other Semi-Volatile Organic Compounds (SVOCs)**

Test Codes: **525.2-SVOC , 625-SVOC or 8270-SVOC**



For lists of analytes see Program Specific Indexes



Clean Water Act (CWA).....page 45

Resource Conservation and Recovery Act (RCRA).....page 52

Safe Drinking Water Act (SWDA).....page 61



**NOTE:** Prior to collection of 525.2, 625 or 8270 samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures

Instructions for Collection:

For drinking water samples, pour the small vial of acid into each sample bottle. Allow source to flow for a few minutes until water temperature stabilizes, **do not use Tygon tubing**. Slowly fill bottles to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

Drinking Water – 2/1L amber glass bottles + acid vials  
Surface Water – 2/1L amber glass bottles  
Hazardous Water – 2/1L amber glass bottles  
Hazardous Soil – 4 oz. amber glass container with Teflon-lined lid

Preservative and Handling:

Drinking Water – HCl to pH <2, 50 mg sodium sulfite  
Surface Water – No preservative  
Hazardous Water – No preservative  
All sample types, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 525.2 -14 days to extract and 30 days to analyze  
625 and 8270 – 7 days to extract and 40 days to analyze  
Soil - 14 days to extract and 40 days to analyze

Method Technology:

Liquid-solid extraction followed by GCMS detection

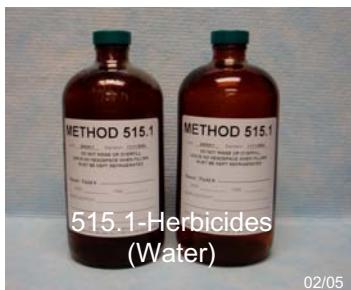
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### ORGANIC CHEMISTRY

Name: **Herbicides (Chlorinated Organic Acids)**

Test Code: **515.1-Herbicides or 8151-Herbicides**



Analytes:  
2,4-D  
2,4,5-TP (Silvex)  
Dalapon  
Dinoseb  
Pentachorophenol  
Picloram

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill bottles to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

Water – 2/1L amber glass bottles  
Soil – 4 oz. amber glass container with Teflon-lined lid

Preservative and Handling:

30 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub> if chlorinated, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 14 days to extract and 28 days to analyze

Method Technology:

Liquid-liquid extraction followed by GC detection

Name: **Carbamates (Insecticides and Aldicarbs)**

Test Code: **531.1**



Analytes:  
3 - Hydroxycarbofuran  
Aldicarb (Temik)  
Aldicarb sulfone  
Aldicarb sulfoxide  
Carbaryl (Sevin)  
Carbofuran (Furadan)  
Methomyl  
Oxamyl (Vydate)

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill vial to top of container, be sure not to over fill to prevent loss of preservative. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

40 mL amber glass vial

Preservative and Handling:

1.2 mL Monochloroacetic acid, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Aqueous injection HPLC with post column derivation

## **ORGANIC CHEMISTRY**

Name: **Phase II / Phase V**

Test Codes: **VOCs\*, Pesticides, SVOCs, Herbicides, and Carbamates**



Grouping: **Organic Testing**

Application: Drinking Water

For lists of analytes see Program Specific Indexes

Safe Drinking Water Act (SWDA).....page 55

**NOTE:** Prior to collection of Phase II / Phase V Organic Testing, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures

**\*Phase II / Phase V may be performed with or without VOC testing**

Instructions for Collection:

For VOC vials, add 2 drops HCl acid to each vial, more drops needed if highly buffered source. For 525.2-SVOC, pour entire small vial of acid into each sample bottle.

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill to top of containers, be sure not to over fill to prevent loss of preservatives. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

VOCs - 3/40mL vials, plus 1 trip blank  
Pesticides and SVOCs - 2/1L amber glass bottles + acid vials  
Herbicides - 2/1L amber glass bottles  
Carbamates - 40 mL amber glass vial

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding times,  
VOCs - 14 days  
Pesticides and SVOCs - 14 days to extract and 30 days to analyze  
Herbicides - 14 days to extract and 28 days to analyze  
Carbamates - 28 days

Methods Technologies:

VOCs - Purge and trap technique followed by GCMS detection  
SVOCs - Liquid-solid extraction followed by GCMS detection  
Herbicides - Liquid-liquid extraction followed by GC detection  
Carbamates - Aqueous injection HPLC with post column derivation

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**ORGANIC CHEMISTRY**

Name: **Total Petroleum Hydrocarbons (TPH)**

Test Code: **8015-TPH**



Analytes: GRO (C6-C10) – Gasoline Range Organics  
DRO (C10-C28) – Diesel Range Organics  
ORO (C28-C35) – Oil Range Organics

**Total TPH (GRO + DRO + ORO)**

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill vials to top of container. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

Water – 2/40 mL vials  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 14 days to extract and 40 days to analyze

Method Technology:

Extraction technique followed by GCFID detection

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Name: **Benzene, Toluene, Ethylbenzene, Xylene, and Naphtalene (BTEX N)**

Test Code: **BTEX N**



Analytes: **Benzene**  
**Toluene**  
**Ethylbenzene**  
**Xylene**  
**Naphtalene**

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill vials to top of container. Check for air bubbles by inverting, and fill the remaining portion if bubbles found. There must be no headspace.

Required Containers/Volume:

Water – 2/40 mL vials  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 14 days

Method Technology:

Purge and trap technique followed by GCMS detection

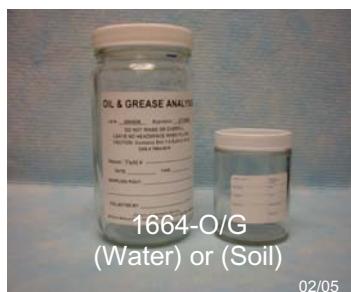
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**ORGANIC CHEMISTRY**

Name: **Oil and Grease**

Test Code: **1664-O/G**



Analyte: Total O/G (Oil and Grease)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill containers to top, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

Water – 1 L glass container with Teflon-lined lid  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Liquid-solid extraction followed by Gravimetric detection

Name: **Polychlorinated Biphenyls (PCBs) and Organochlorine Pesticides (OcPest)**

Test Codes: **608-PCB/OcPest or 8081-PCB/OcPest**



For lists of analytes see Program Specific Indexes

Clean Water Act (CWA).....page 41

Resource Conservation and Recovery Act (RCRA).....page 48

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

Surface Water – 1 L amber glass bottle  
Hazardous Water – 1 L amber glass bottle  
Hazardous Soil – 4 oz. amber glass container with Teflon-lined lid  
Hazardous Oil – 4 oz. amber glass container with Teflon-lined lid

Preservative and Handling:

No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 7 days to extract and 40 days to analyze, except Soil 14 days to extract and 40 days to analyze

Method Technology:

Extraction technique followed by GCMS detection

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**ORGANIC CHEMISTRY**

Name: **Glycols (Ethylene and Propylene Glycols)**

Test Code: **EPG**



Analytes: Ethylene Glycol  
Propylene Glycol

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

Water – 2/40 mL vials  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Aqueous injection with GCFID detection

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Name: **Surfactants**

Test Code: **5540C-Surfactants**



Grouping: **New Drinking Water Source**

Analyte: Total Surfactants

Instructions for Collection:

Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L amber glass bottle

Preservative and Handling:

No preservative, refrigerate or store on ice and do not allow to freeze, **recommend same day receipt at lab**, total holding time 48 hours

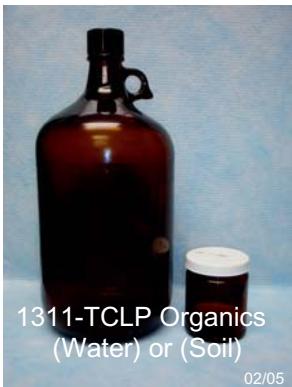
Method Technology:

Extraction technique followed by MBAS detection

## **ORGANIC CHEMISTRY**

Name: **RCRA Toxic Characteristic Leaching Procedure (TCLP)**

Test Codes: **TCLP-Organics (VOCs, SVOCs, Pesticides, and Herbicides)**



Grouping: **Organic Testing (RCRA)**

Application: Land Disposal Restrictions Rule and Toxicity Characteristics, used to determine if characteristics of a waste pose an unacceptable risk to the environment or ground water

**NOTE:** Prior to collection of 1311-TCLP (water and soil) or 1332-TCLP (oil), analysis must be scheduled at 801-883-4655 due to complex nature of testing procedures

Analytes:

**Volatile Organic Compounds (VOCs)**

- D029 1,1 - Dichloroethene  
D028 1,2 - Dichloroethane  
D027 1,4 - Dichlorobenzene  
D018 Benzene  
D019 Carbon Tetrachloride  
D021 Chlorobenzene  
D022 Chloroform  
D035 Methyl Ethyl Ketone  
D039 Tetrachloroethene  
D040 Trichloroethene  
D043 Vinyl Chloride

**Pesticides**

- D020 Chlordane  
D012 Endrin  
D031 Heptachlor  
D031 Heptachlor Epoxide  
D013 Lindane  
D014 Methoxychlor  
D015 Toxaphene

**Herbicides**

- D016 2,4 - D  
D017 2,4,5 - TP (Silvex)

**Semi-Volatile Organic Compounds (SVOCs)**

- D030 2,4 - Dinitrotoulene  
D041 2,4,5 - Trichlorophenol  
D042 2,4,6 - Trichlorophenol  
D032 Hexachlorobenzene  
D033 Hexachlorobutadiene  
D034 Hexachloroethane

- D024 m - Cresol  
D036 Nitrobenzene  
D023 o - Cresol  
D025 p - Cresol  
D037 Pentachlorophenol  
D038 Pyridine

Instructions for Collection: Slowly fill to top of container.

Required Containers/Volume: Hazardous Water – 4 L amber glass bottle  
Hazardous Soil – 4 oz. amber glass container with Teflon-lined lid  
Hazardous Oil – 4 oz. amber glass container with Teflon-lined lid

Preservative and Handling: Refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times:  
SVOCs - 7 days to TCLP and 40 days to analyze  
VOCs - 14 days to TCLP and 40 days to analyze

Method Technology: Leaching procedure and extraction technique followed by GCMS detection

## **INORGANIC CHEMISTRY**

Name: **New Drinking Water Source (46 parameters)**

Test Code: **Type 7 (Total Inorganics and Metals Chemistry)**



Analytes:	Sulfate NO <sub>2</sub> +NO <sub>3</sub> Cyanide D-Calcium D-Potassium Bicarbonate Carbonate Hydroxide T-Phosphate Hardness Turbidity (NTU) T-Aluminum T-Arsenic T-Beryllium T-Chromium T-Iron T-Manganese T-Nickel T-Silver T-Boron T-Antimony T-Thallium Corrosivity L-pH or F-pH	Total Suspended Solids (TSS) Total Organic Carbon (TOC) Ammonia D-Magnesium D-Sodium Carbon Dioxide Fluoride Silica Alkalinity Surfactant L-Specific Conductivity Total Dissolved Solids (TDS) T-Barium T-Cadmium T-Copper T-Lead T-Mercury T-Selenium T-Zinc Color Odor (TON) Carbonate (CO <sub>3</sub> ) Solids Chloride
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D = Dissolved

T = Total

L = Lab measured

F = Field measured

**NOTE:** Prior to collection of New Drinking Water Source samples, analysis must be scheduled with the laboratory at 801-883-4655, due to complex nature of testing procedures

Instructions for Collection: Allow sample tap to run for a few minutes until water temperature stabilizes. Slowly fill to top of bottles, be sure not to over fill to prevent loss of preservatives.

Required Containers/Volume: 1 L Odor – amber glass bottle  
500 mL Nutrient Analysis – plastic bottle  
1 L Total Chemistry – unpreserved plastic bottle  
250 mL Color – plastic bottle  
1 L Surfactant – amber glass bottle  
200 mL TOC – amber glass bottle  
250 mL Total Metals – plastic bottle  
500 mL Cyanide – plastic bottle

Preservative and Handling: Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab, must be received at lab within 24 hours of collection time**

Methods Technologies: Electrometric, Nephelometric, Gravimetric, Titration, Flow Injection Colorimetry, Ion Chromatography, ICP, and ICPMS

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### INORGANIC CHEMISTRY

Name: **Annual Inorganics and Metals (18 parameters)**

Test Code: **Type 9 (Primary Inorganics and Metals Chemistry)**



Analytes:	Cyanide Turbidity (NTU) T-Arsenic T-Beryllium T-Chromium T-Lead T-Nickel T-Antimony T-Sodium	Fluoride Total Dissolved Solids (TDS) T-Barium T-Cadmium T-Copper T-Mercury T-Selenium T-Thallium Sulfate
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Instructions for Collection:

Allow sample tap to flow for a few minutes until water temperature stabilizes. Slowly fill containers to top, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle  
250 mL Total Metals – plastic bottle  
500mL Cyanide – plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab, must be received at lab within 24 hours of collection time**

Methods Technologies:

Nephelometric, Gravimetric, Flow Injection Colorimetry, Ion Chromatography, ICP, and ICPMS

Name: **Lead and Copper [ Pb ] and [ Cu ]**

Test Code: **200.8-Type 8 Metals (T-PB and T-CU)**



Grouping: **Total-Metals**

Application: Corrosion Control Assessment, Drinking Water

Analytes: Lead (T-Pb, Total)  
Copper (T-Cu, Total)

Instructions for Collection:

Allow sample tap to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Lead and Copper – plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, holding times,  
14 days to arrive at lab for preservation with HNO<sub>3</sub> to pH <2  
and 6 months to analyze

Method Technology:

Digestion technique followed by ICPMS detection

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**INORGANIC CHEMISTRY**

Name: **Arsenic [ As ]**

Test Code: **200.8-T-AS , 200.8-D-AS**



Grouping: **Total-Metals**

Applications: Arsenic Rule, Drinking Water  
Surface Water  
Hazardous Samples

Analytes: Arsenic (T-As, Total)  
Arsenic (D-As, Dissolved)

Instructions for Collection:

Allow sample tap to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

250 mL Total Metals – plastic bottle

Preservative and Handling:

HNO<sub>3</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 6 months

Method Technology:

Digestion technique followed by ICPMS detection

Name: **Mercury [ Hg ]**

Test Codes: **245.1-T-HG , 245.1-D-HG , 7471A (T-HG or D-HG)**



Grouping: **Total-Metals**

Applications: Drinking Water  
Surface Water  
Hazardous Samples

Analytes: Mercury (T-Hg, Total)  
Mercury (D-Hg, Dissolved)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

Water – 250 mL Total Metals – plastic bottle  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

HNO<sub>3</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Digestion technique followed by Cold Vapor AA detection

## INORGANIC CHEMISTRY

Name: **Total-Metals and Dissolved-Metals (analytical groupings)**

Test Codes: **Total-Metals    Type 7 , Type 9    RCRA Types**

**Filtered-Metals    Type 3 , Type 4**

**6010-Metals (Soil)**



**Type 7**

T-Aluminum  
T-Arsenic  
T-Barium  
T-Cadmium  
T-Chromium  
T-Copper  
T-Iron  
T-Lead  
T-Manganese  
T-Mercury  
T-Selenium  
T-Silver  
T-Zinc

**Type 3**

D-Aluminum  
D-Arsenic  
D-Barium  
D-Cadmium  
D-Calcium  
D-Chromium  
D-Copper  
D-Iron  
D-Lead  
D-Magnesium  
D-Manganese  
D-Mercury  
D-Potassium  
D-Selenium  
D-Silver



**Type 9**

T-Barium  
T-Cadmium  
T-Chromium  
T-Mercury  
T-Selenium

D-Sodium  
D-Zinc  
Hardness



**RCRA 8**

T-Arsenic  
T-Barium  
T-Cadmium  
T-Chromium  
T-Lead  
T-Mercury  
T-Selenium  
T-Silver  
T-Zinc

**RCRA 8+4**

T-Arsenic  
T-Barium  
T-Cadmium  
T-Chromium  
T-Lead  
T-Mercury  
T-Selenium  
T-Silver  
T-Copper  
T-Iron  
T-Manganese  
T-Zinc

**RCRA 8+4+6**

T-Arsenic  
T-Barium  
T-Cadmium  
T-Chromium  
T-Lead  
T-Mercury  
T-Selenium  
T-Silver  
T-Copper  
T-Iron  
T-Manganese  
T-Zinc

**NOTE:** To test for Dissolved analytes, field filtration must be done at time of sample collection and Filtered-Metals bottle used

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

250 mL Total Metals – plastic bottle  
250 mL Filtered Metals – plastic bottle  
Soil – 4 oz. glass container with Teflon-lined lid

Preservative and Handling:

HNO<sub>3</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 180 days to analyze, except Mercury 28 days to analyze

Methods Technologies:

Digestion techniques (except for Drinking Water) followed by ICP, ICPMS, and Cold Vapor AA detections

## INORGANIC CHEMISTRY

Name: **Ammonia [ NH<sub>3</sub> ]**

Test Code: **350.3-NH3**



Groupings: **Total-Nutrients**

Applications: Drinking Water  
Surface Water

Analyte: Ammonia

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

500 mL Nutrient Analysis – plastic bottle

Preservative and Handling:

H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Digestion technique followed by Flow Injection Colorimetry

---

Name: **Phosphate [ PO<sub>4</sub> ]**

Test Codes: **365.1-TPO4 , 365.1-D-TP**



Groupings: **Total-Nutrients  
Filtered-Nutrients**

Applications: Drinking Water  
Surface Water

Analytes: Phosphate (TPO<sub>4</sub>, Total)  
Phosphate (D-TP, Dissolved)  
Phosphate (Ortho)

**NOTE:** **Prior to collection of Phosphate (Ortho), analysis must be scheduled with the laboratory**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

500 mL Nutrient Analysis – plastic bottle

Preservative and Handling:

H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days, for Phosphate (Ortho) contact laboratory

Method Technology:

Digestion technique followed by Flow Injection Colorimetry

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### INORGANIC CHEMISTRY

Name: **Nitrate and Nitrite [ NO<sub>3</sub>+NO<sub>2</sub> ] , Nitrite [ NO<sub>2</sub> ]**

Test Codes: **353.2-NO<sub>2</sub>+NO<sub>3</sub> , 353.2-NO<sub>2</sub>**



Groupings: **Total-Nutrients  
Filtered-Nutrients**

Applications: Drinking Water  
Surface Water

Analytes: Nitrate/Nitrite (NO<sub>2</sub>+NO<sub>3</sub>)  
Nitrite (NO<sub>2</sub>)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

120 mL Nitrate – plastic bottle  
500 mL Total Nutrients – plastic bottle (also applicable)  
120 mL Nitrite – unpreserved plastic bottle

Preservative and Handling:

Nitrate – H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days  
Nitrite – No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 48 hours

Method Technology:

Flow Injection Colorimetry

---

Name: **Sulfate [ SO<sub>4</sub> ]**

Test Codes: **300.0-SO<sub>4</sub>C or 375.2-SO<sub>4</sub>**



Applications: Drinking Water  
Surface Water

Analyte: Sulfate

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Sulfate – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Ion Chromatography and Flow Injection Colorimetry

## **INORGANIC CHEMISTRY**

Name: **Total-Nutrients and Dissolved-Nutrients (analytical groupings)**

Test Codes: **Total-Nutrients Type 2 , Type 3 , Type 4 , Type 6**

**Filtered-Nutrients Type 9**



Types 2, 3, 4, or 6  
(Nutrient Analysis bottle)

**Type 2**

Ammonia  
Phosphate (T-PO4)

**Type 6**

Phosphate (T-PO4)  
Nitrate+Nitrite (NO<sub>2</sub>+NO<sub>3</sub>)

**Type 3**

Ammonia  
Phosphate (T-PO4)  
Nitrate+Nitrite (NO<sub>2</sub>+NO<sub>3</sub>)

**Type 9**

Phosphate (D-TP)  
D-Nitrate+Nitrite (NO<sub>23</sub>)



Type 9  
(Filtered-Nutrients bottle)

**Type 4**

Ammonia  
Phosphate (T-PO4)  
Nitrate+Nitrite (NO<sub>2</sub>+NO<sub>3</sub>)

D = Dissolved

T = Total

**NOTE:** To test for Dissolved analytes, field filtration must be done at time of sample collection and Filtered-Nutrients bottle used

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

500 mL Nutrient Analysis – plastic bottle  
250 mL Filtered Nutrients – plastic bottle

Preservative and Handling:

H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

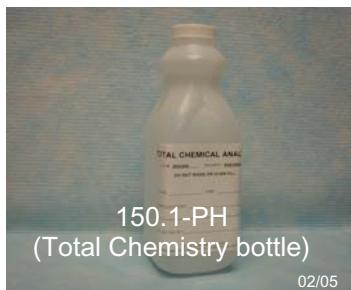
Methods Technologies:

Digestion techniques (except for Nitrate+Nitrite) followed by Flow Injection Colorimetry

## INORGANIC CHEMISTRY

Name: **pH**

Test Code: **150.1-pH**



Grouping: **Total-Chemistry**

Applications: Drinking Water  
Surface Water

Analyte: L-pH

L = Lab measured

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 24 hours

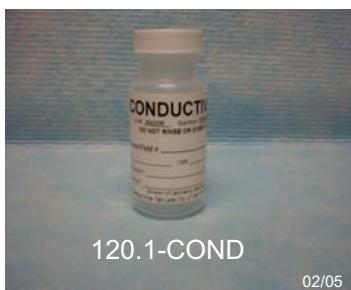
Method Technology:

Electrometric Measurement

---

Name: **Conductivity**

Test Code: **120.1-COND**



Grouping: **Total-Chemistry**

Applications: Total-Metals and Filtered-Metals  
Corrosivity  
Radiologic Testing

Analyte: L-Specific Conductance

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Conductivity – unpreserved plastic bottle  
1 L Total Chemistry – unpreserved plastic bottle (also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Specific Conductance

---

Name: **Corrosivity**

Test Code: **CORR**

**Note: Corrosivity requires testing of Calcium, TDS, Hardness, Alkalinity, and F-pH (field measured)**

Required Containers/Volume:

250 mL Total Metals – plastic bottle (see page 16)

1 L Total Chemistry – plastic bottle (see page 29)

Method Technology:

Calculation: Calcium, TDS, Hardness, Alkalinity, and F-pH levels

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**INORGANIC CHEMISTRY**

Name: **Color**

Test Code: **110.2-COLR**



Grouping: **New Drinking Water Source**

Applications: Drinking Water

Analyte: Color

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

250 mL Color – plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 48 hours

Method Technology:

Flow Injection Colorimetry

---

Name: **Odor**

Test Code: **140.1-ODOR**



Grouping: **New Drinking Water Source**

Applications: Drinking Water

Analyte: Odor, Threshold Odor Number (TON)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Odor – amber glass bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 24 hours

Method Technology:

Odor Threshold (Consistent Series)

---

Name: **Hardness (Total Hardness as CaCO<sub>3</sub>)**

Test Code: **HARD**

**Note: Hardness requires testing of Calcium and Magnesium**

Required Containers/Volume:

250 mL Total Metals – plastic bottle (see page 16)

Method Technology:

Calculation: Based on Calcium and Magnesium levels

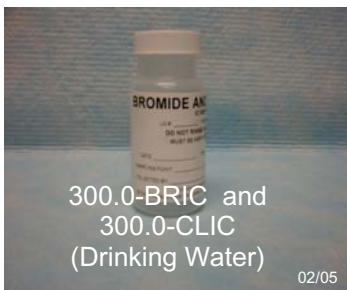
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**INORGANIC CHEMISTRY**

Name: **Bromide [ Br ] , Chloride [ Cl ]**

Test Codes: **300.0-BRIC , 300.0-CLIC or 325.2-CL**



Grouping: **Disinfectants**

Applications: Drinking Water  
Surface Water

Analytes: Bromide  
Chloride

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Bromide and Chloride – unpreserved plastic bottle  
120 mL Sulfate – unpreserved plastic bottle (also applicable)  
1 L Total Chemistry – unpreserved plastic bottle (also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Ion Chromatography and Flow Injection Colorimetry

Name: **Bromate [ BrO<sub>3</sub> ] , Chlorate [ ClO<sub>3</sub> ] , Chlorite [ ClO<sub>2</sub> ]**

Test Codes: **300.0-BRO3 , 300.0-CLO3 , 300.0-CLO2**



Grouping: **Disinfection By-Products**

Applications: Drinking Water  
Surface Water

Analytes: Bromate  
Chlorate  
Chlorite

**NOTE:** **Prior to collection, analysis must be scheduled with the laboratory**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

500 mL Bromate, Chlorate, Chlorite – amber PVC bottle

Preservative and Handling:

25 mg Ethylenediamine, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, holding times, 28 days to analyze, except Chlorite 14 days to analyze

Method Technology:

Ion Chromatography

## **INORGANIC CHEMISTRY**

Name: **Perchlorate [ ClO<sub>4</sub> ]**

Test Code: **314.0-CLO4**



Application: Drinking Water

Analytes: Perchlorate  
Conductivity

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Perchlorate – unpreserved plastic bottle  
1L Total Chemistry – unpreserved plastic bottle (also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time  
28 days

Method Technology:

Ion Chromatography

---

Name: **Cyanide [ CN ]**

Test Code: **335.4-CNCL**



Applications: Drinking Water  
Surface Water

Analyte: Cyanide

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

500 mL Cyanide – plastic bottle

Preservative and Handling:

2g NaOH to pH >12, ascorbic acid in the presence of residual chlorine, refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time 14 days

Method Technology:

Flow Injection Colorimetry

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**INORGANIC CHEMISTRY**

Name: **Fluoride [ F ]**

Test Code: **4500C-F**



Application: Drinking Water  
Surface Water

Analyte: Fluoride

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

500 mL Fluoride – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time 28 days

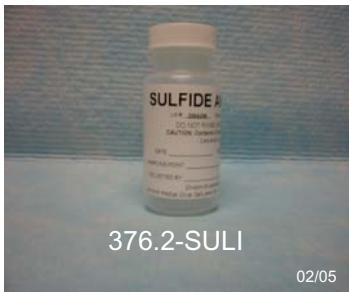
Method Technology:

Flow Injection Colorimetry

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Name: **Sulfide [ S ]**

Test Code: **376.2-SULI**



Applications: Drinking Water  
Surface Water

Analyte: Sulfide

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

120 mL Sulfide – plastic bottle

Preservative and Handling:

3 drops Zinc Acetate and NaOH to pH >9, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 7 days

Method Technology:

Flow Injection Colorimetry

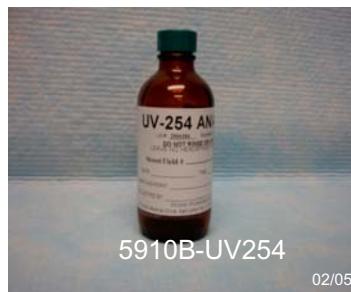
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### INORGANIC CHEMISTRY

Name: **Total Organic Carbon (TOC)** , **UV254**

Test Codes: **5310B-TOC** , **5910B-UV254**



Grouping: **Water Treatment Technique**

Applications: Drinking Water  
Surface Water

Analytes: **TOC**  
**UV254**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

200 mL TOC – amber glass bottle  
200 mL UV254 – amber glass bottle

Preservative and Handling:

TOC – H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

UV254 – No preservative, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 48 hours

Method Technology:

Combustion-Infrared Detection and UV Absorbance

---

Name: **Alkalinity**

Test Code: **2320B-ALK**



Applications: Drinking Water  
Surface Water

Analytes: Alkalinity  
Carbonate Solids  
Carbonate  
Bicarbonate (BICD)  
Carbon Dioxide  
Hydroxide

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Alkalinity – unpreserved plastic bottle  
1L Total Chemistry – unpreserved plastic bottle (also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, total holding time 14 days

Method Technology:

pH Titration and Calculation

## INORGANIC CHEMISTRY

Name: **Biological Oxygen Demand (BOD)**

Test Codes: **405.1-BOD** , **CBOD (Carbonate buffered BOD)**



Application: Surface Water

Analytes: BOD5 (5 day)  
CBOD (Carbonate buffered BOD, 5 day)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

2 L BOD – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 48 hours

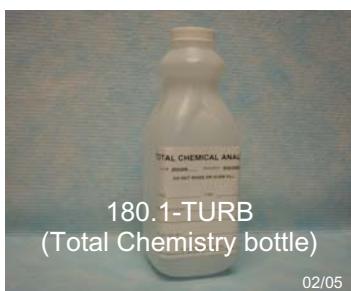
Method Technology:

Dissolved Oxygen Reduction over 5 days at 20 °C

---

Name: **Turbidity**

Test Code: **180.1-TURB**



Grouping: **Total-Chemistry  
Water Treatment Technique**

Applications: Drinking Water  
Surface Water

Analyte: Turbidity (NTU)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 48 hours

Method Technology:

Nephelometric Absorbance

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**INORGANIC CHEMISTRY**

Name: **Chemical Oxygen Demand (COD)**

Test Code: **410.4-COD**



Application: Surface Water

Analyte: COD

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

500 mL Nutrient Analysis – plastic bottle

Preservative and Handling:

H<sub>2</sub>SO<sub>4</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 28 days

Method Technology:

Spectrophotometry

---

Name: **Chlorophyll-A**

Test Code: **10200H-CH-A**



Applications: Surface Water

Analyte: Chlorophyll-A

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Filter 25 to 500 mL through glass fiber filter then place filter in opaque container. Also, make sure to record sample volume filtered on test request form.

Required Containers/Volume:

Chlorophyll-A filter – store in opaque container (eg, film canister)

Preservative and Handling:

Keep frozen, **recommend next day receipt at lab**, total holding time 3 weeks

Method Technology:

Homogenization followed by Spectrophotometry

## INORGANIC CHEMISTRY

Name: **Solids**

Test Codes: **160.1-TDS , 160.2-TSS , 160.4-TVS , 160.5-SS**



Applications: Drinking Water  
Surface Water

Analytes: Total Dissolved Solids (TDS) – filterable  
Total Suspended Solids (TSS) – non-filterable  
Total Volatile Solids (TVS)  
Settable Solids (SS)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, holding times,  
7 days to analyze, except SS 48 hours to analyze

Method Technology:

Gravimetric detection

---

Name: **Silica [ SiO<sub>2</sub> ]**

Test Code: **370.1-SIO2**



Applications: Drinking Water  
Surface Water

Analyte: Silica (SIO<sub>2</sub>)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend same day receipt at lab**, total holding time 28 days

Method Technology:

Flow Injection Colorimetry

## **INORGANIC CHEMISTRY**

Name: **Total-Chemistry (analytical groupings)**

Test Codes: **Total-Chemistry Type 2 , Type 3 , Type 9**



**Type 2**

pH  
Total Suspended Solids (TSS)  
Bicarbonate  
Carbon Dioxide  
Carbonate  
Chloride  
Hydroxide  
Sulfate  
Alkalinity  
Turbidity (NTU)  
L-Specific Conductance  
Total Dissolved Solids (TDS)

**Type 3**

pH  
Total Suspended Solids (TSS)  
D-Calcium  
D-Magnesium  
D-Potassium  
D-Sodium  
Bicarbonate  
Carbon Dioxide  
Carbonate  
Chloride  
Hydroxide  
Sulfate  
Alkalinity  
Hardness  
Turbidity (NTU)  
L-Specific Conductance  
Total Dissolved Solids (TDS)  
Carbonate Solids

**Type 9**

Cyanide  
Fluoride  
Turbidity (NTU)  
Total Dissolved Solids (TDS)  
T-Arsenic  
T-Barium  
T-Beryllium  
T-Cadmium  
T-Chromium  
T-Copper  
T-Lead  
T-Mercury  
T-Nickel  
T-Selenium  
T-Antimony  
T-Thallium  
T-Sodium  
Sulfate

D = Dissolved

T = Total

L = Lab measured

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Total Chemistry – unpreserved plastic bottle

Type 9 also under Annual Inorganics and Metals (see page 14)

1 L Total Chemistry – unpreserved plastic bottle

250 mL Total Metals – plastic bottle

500mL Cyanide – plastic bottle

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 48 hours

Methods Technologies:

Electrometric, Nephelometric, Gravimetric, Titration, Flow Injection Colorimetry, Ion Chromatography, ICP, and ICPMS

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**INORGANIC CHEMISTRY**

Name: **Chromium-VI [ Cr<sup>6+</sup> ]**

Test Code: **3500CD-CR6+**



Analyte: Chromium-VI (Hexavalent)

**NOTE:** Prior to collection of Chromium-VI samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

120 mL Chromium-VI – unpreserved plastic bottle  
1 L Total Chemistry – unpreserved plastic bottle (also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze, **recommend same day receipt at lab**, total holding time 24 hours

Method Technology:

Flow Injection Colorimetry

Name: **Uranium [ U ]**

Test Codes: **200.8-UUMS (Total) , 200.8-UFMS (Dissolved)**



Applications: Drinking Water  
Surface Water

Analytes:

T-Uranium (Unfiltered)  
D-Uranium (Filtered)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill containers to top, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

250 mL Total Metals – plastic bottle  
2 L RadioChem – plastic bottle (also applicable for Uranium)

Preservative and Handling:

HNO<sub>3</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 180 days

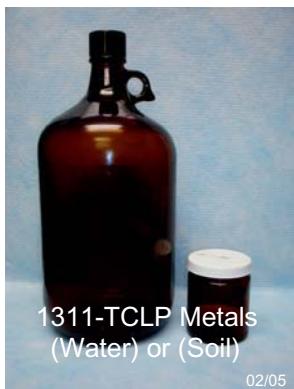
Method Technology:

Digestion techniques (except for Drinking Water) followed by ICPMS detection

## **INORGANIC CHEMISTRY**

Name: **RCRA Toxic Characteristic Leaching Procedure (TCLP)**

Test Code: **TCLP- Metals**



Grouping: **Inorganic Testing (RCRA)**

Application: Land Disposal Restrictions Rule and Toxicity Characteristics, used to determine if characteristics of a waste pose an unacceptable risk to the environment or ground water

**NOTE:** **Prior to collection of 1311-TCLP (water and soil) or 1332-TCLP (oil), analysis must be scheduled at 801-883-4655 due to complex nature of testing procedures**

Analytes:

**RCRA 8**

D004 T-Arsenic  
D005 T-Barium  
D006 T-Cadmium  
D007 T-Chromium  
D008 T-Lead  
D009 T-Mercury  
D010 T-Selenium  
D011 T-Silver

**RCRA 8+4**

D004 T-Arsenic  
D005 T-Barium  
D006 T-Cadmium  
D007 T-Chromium  
D008 T-Lead  
D009 T-Mercury  
D010 T-Selenium  
D011 T-Silver  
  
T-Copper  
T-Iron  
T-Manganese  
T-Zinc

**RCRA 8+4+6**

D004 T-Arsenic  
D005 T-Barium  
D006 T-Cadmium  
D007 T-Chromium  
D008 T-Lead  
D009 T-Mercury  
D010 T-Selenium  
D011 T-Silver  
  
T-Copper  
T-Iron  
T-Manganese  
T-Zinc  
  
T-Aluminum  
T-Beryllium  
T-Cobalt  
T-Molybdenum  
T-Nickel  
T-Vanadium

\*Other metals may be analyzed, but must be specified on test request form. For complete list of metals see indexes or contact us 801-584-8400.

Instructions for Collection: Slowly fill to top of container.

Required Containers/Volume: Water - 4 L amber glass bottle  
Soil - 4 oz. amber with Teflon-lined lid glass container

Preservative and Handling: Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, holding times,  
Metals - 7 days to TCLP and 180 days to analyze  
except Mercury - 7 days to TCLP and 28 days to analyze

Method Technology: Leaching procedure and extraction technique followed by ICP, ICPMS, and Cold Vapor AA detections

## **ENVIRONMENTAL MICROBIOLOGY**

Name: **Total Coliform , Fecal Coliform and *E. coli***

Test Codes: **9223B-Colilert , 9222B/9221E-mENDO+EC , 9222B/9222D-mENDO+mFC**



Applications: Drinking Water  
Surface Water

Analytes: Total Coliforms  
Fecal Coliforms  
*E. coli* (Colilert test only)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

120 mL Water Bacteriology – sterile plastic bottle

Preservative and Handling:

10 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, refrigerate or store on ice and do not allow to freeze, **recommend same day receipt at lab**, total holding time 30 hours, except for Surface Water samples 8 hours

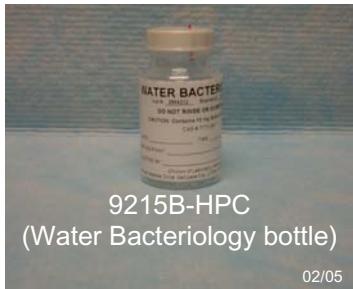
Method Technology:

Chromofluorogenic, Membrane Filtration, and Fermentation

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Name: **Heterotrophic Plate Count (HPC)**

Test Code: **9215B-HPC**



Applications: Drinking Water  
Pool/Spa Water  
Reagent Water (Deionized, RO, Distilled, etc.)  
Surface Water

Analyte: Heterotrophic Plate Count (total bacteria count)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative.

Required Containers/Volume:

120 mL Water Bacteriology – sterile plastic bottle

Preservative and Handling:

10 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, refrigerate or store on ice and do not allow to freeze, **recommend same day receipt at lab**, total holding time 30 hours, except for Surface Water samples 8 hours

Method Technology:

Pour Plate Agar

## **ENVIRONMENTAL MICROBIOLOGY**

Name: ***Cryptosporidium* and *Giardia***

Test Code: **1623-Protozoa**



Grouping: **Water Treatment Technique**

Application: Surface Water Treatment Rule (LT2)

Analytes: *Cryptosporidium* (oocysts)  
*Giardia* (cysts)



**NOTE:** **Prior to collection of 1623-Protozoa samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. For bulk water samples, slowly fill to top of container. For field filtration, pressurized flow is necessary to pass the required 10 L (2.6 gal) volume through the capsule filter (a pump may be needed for stream flow analysis or where pressurized flow is not available). Also, make sure to record sample volume filtered on test request form.

Required Containers/Volume:

1 µm pore size Pall Envirochek HV – capsule filter  
20 L Carboy – plastic bottle (6-1 gal plastic jugs also applicable)

Preservative and Handling:

Refrigerate or store on ice and do not allow to freeze,  
**recommend next day receipt at lab**, holding times, 96 hours to elution, 72 hours to staining, and 7 days to complete microscopy analysis

For regulatory analysis, samples must arrive at laboratory at less than 10 °C or arrive the same day as collected

Method Technologies:

Filtration, Elution, Centrifugation, Immunomagnetic Separation, Fluorescent-conjugated Antibody Staining, and Advanced Microscopy with Differential Interference Contrast

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### ENVIRONMENTAL MICROBIOLOGY

Name: **Legionella**

Test Code: **9260J-Legionella**



Applications: Drinking Water (Hot Water Tanks)  
Air Handling (Swamp Coolers, Evaporators, etc.)

Analyte: **Legionella**

**NOTE:** Prior to collection of 9260J-Legionella samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures (batch analysis performed on third Thursday of each month)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

2 L Legionella – unpreserved plastic bottle

Preservative and Handling:

**Same day receipt at lab**, no holding time

Method Technology:

Filtration, Elution, MWY Agar, and Latex-Agglutination

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Name: **Aeromonas**

Test Code: **1605-Aeromonas**



Applications: Drinking Water  
(UCMR List 2)

Analyte: **Aeromonas**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Aeromonas – sterilized glass bottle  
2-1L Aeromonas – sterilized glass bottles (for Matrix Spike)

Preservative and Handling:

30 mg Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>, 372 mg EDTA, Refrigerate or store on ice and do not allow to freeze, **recommend same day receipt at lab**, total holding time 30 hours

Method Technology:

Membrane Filtration, ADA-V Agar, and Tube Fermentation

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Name: **Enterococcus**

Test Code: **Type 9-ECOCCI** Note: **Enterococcus tested with Total/Fecal Coliforms for Surface Water analysis**

Required Containers/Volume:

120 mL Water Bacteriology – sterile plastic bottle (see page 32)

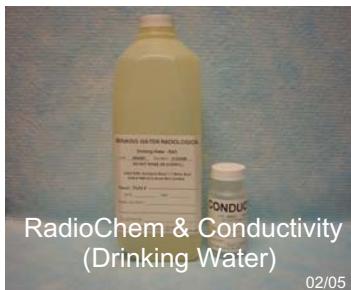
Method Technology:

Enzyme Substrate

## RADIOLOGIC CHEMISTRY

Name: **Gross-Alpha , Radium-228 , Uranium [ U ]**

Test Codes: **900.0-ALPG , 904.0-228R , 200.8-UUMS\* , 200.8-UFMS\***



Grouping: **Radiologic Testing**

Applications: Drinking Water  
Surface Water

Analytes: Gross-Alpha  
Radium-228  
Uranium (UUMS-Unfiltered)  
Uranium (UFMS-Filtered)  
Conductivity



**NOTE:** **Uranium also listed under Inorganic Testing (see page 30)**

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative. Do not pour from RadioChem bottle to Conductivity bottle, must fill Conductivity separately.

Required Containers/Volume:

Drinking Water

2 L RadioChem – plastic bottle

\*250 mL Total Metals – plastic bottle (also applicable for Uranium)  
120 mL Conductivity – plastic bottle

Surface Water

2-2 L RadioChem – plastic bottles

\*250 mL Total Metals – plastic bottle (also applicable for Uranium)  
120 mL Conductivity – plastic bottle

Preservative and Handling:

HNO<sub>3</sub> to pH <2, **recommend next day receipt at lab,**  
total holding time 180 days

Methods Technologies:

Evaporation, Co-Precipitation, and Gas-Flow Proportional Counter  
Uranium detected by ICPMS

## RADIOLOGIC CHEMISTRY

Name: **Gross-Beta , Radium-226**

Test Codes: **900.0-BETG , 903.1-226R**



Grouping: **Radiologic Testing**

Applications: Drinking Water  
Surface Water

Analytes: Gross-Beta  
Radium-226  
Conductivity



Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative. Do not pour from RadioChem bottle to Conductivity bottle, must fill Conductivity separately.

Required Containers/Volume:

Drinking Water

2 L RadioChem – plastic bottle  
120 mL Conductivity – plastic bottle

Surface Water

2-2 L RadioChem – plastic bottles  
120 mL Conductivity – plastic bottle

Preservative and Handling:

HNO<sub>3</sub> to pH <2, refrigerate or store on ice and do not allow to freeze, **recommend next day receipt at lab**, total holding time 180 days

Methods Technologies:

Evaporation, Co-Precipitation, Emanation, and Gas-Flow Proportional Counter

## RADIOLOGIC CHEMISTRY

Name: **Radon [ Rn ] , Gross Gamma**

Test Codes: **913.0-RN , 901.1-GAMG**



Grouping: **Radiologic Testing**

Applications: Drinking Water  
Surface Water

Analytes: Radon  
Gamma Emission  
Conductivity



**NOTE:** **Radon testing must be scheduled at 801-883-4655, due to complex nature of testing procedures**



Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container, be sure not to over fill to prevent loss of preservative. For Radon, check for air bubbles by inverting and fill the remaining portion if bubbles found. There must be no headspace. Also, do not pour from RadioChem bottle to Conductivity bottle, must fill Conductivity separately.

Required Containers/Volume:

Radon

3-40 mL Radon – unpreserved glass vials

Gross Gamma (Drinking Water)

2 L RadioChem – plastic bottle

120 mL Conductivity – plastic bottle

Gross Gamma (Surface Water)

2-2 L RadioChem – plastic bottles

120 mL Conductivity – plastic bottle

Preservative and Handling:

Radon – No preservative, use insulated packaging, **mandatory next day receipt at lab**, total holding time 72 hours

Gross Gamma – HNO<sub>3</sub> to pH <2, **recommend next day receipt at lab**, total holding time 180 days

Methods Technologies:

LS Counter and Gamma Spectrometer

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**SPECIALTY ANALYSES**

Name: **Geosmin and MIB**

Test Code: **525.2-ODOR**



Applications: Drinking Water

Analytes: Geosmin  
2-Methylisoborneol (MIB)

**NOTE:** Prior to collection of 525.2-ODOR samples, analysis must be scheduled at 801-883-4655, due to complex nature of testing procedures (batch analysis is preferred)

Instructions for Collection:

Allow source to flow for a few minutes until water temperature stabilizes. Slowly fill to top of container.

Required Containers/Volume:

1 L Method 525.2 Odor – amber glass bottle

Preservative and Handling:

**Same day receipt at lab**, no holding time

Method Technology:

Liquid-solid extraction followed by GCMS detection

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Name: **Lead (air samples)**

Test Code: **200.8-T-Pb**



Application: Air Quality

Analyte: Lead (air sample particulate analysis)

Instructions for Collection:

Air monitoring technique to capture particulates using filter paper.

Required Containers/Volume:

Store filtered samples in plastic bag

Preservative and Handling:

Filter digestion followed by ICPMS detection

Method Technology:

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA)**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Alkalinity	2320B-ALK	1505	Inorganic Chemistry	25,29
Aluminum	200.8-AL	1000	Inorganic Chemistry-Metals	16
Ammonia	350.3-NH3	1515	Inorganic Chemistry-Nutrients	17,19
Antimony	200.8-SB	1005	Inorganic Chemistry-Metals	16
Arsenic	200.8-AS	1010	Inorganic Chemistry-Metals	15,16
Barium	200.8-BA	1015	Inorganic Chemistry-Metals	16
Beryllium	200.8-BE	1020	Inorganic Chemistry-Metals	16
BOD	405.1-BOD	1530	Inorganic Chemistry	26
Boron	200.7-B	1025	Inorganic Chemistry-Metals	16
Cadmium	200.8-CD	1030	Inorganic Chemistry-Metals	16
Calcium	200.7-CA	1035	Inorganic Chemistry-Metals	16
CBOD	CBOD	1555	Inorganic Chemistry	26
Chloride	352.2-CL	1575	Inorganic Chemistry	22,29
Chlorophyll-A	10200H-CH-A	9345	Inorganic Chemistry	27
Chromium	200.8-CR	1040	Inorganic Chemistry-Metals	16
Chromium-IV	3500CD-CR6+	1045	Inorganic Chemistry	30
Cobalt	200.8-CO	1050	Inorganic Chemistry-Metals	16
COD	410.4-COD	1565	Inorganic Chemistry	27
Conductivity	120.1-COND	1610	Inorganic Chemistry	20,29
Copper	200.8-CU	1055	Inorganic Chemistry-Metals	16
Cyanide	335.4-CNCL	1635	Inorganic Chemistry	23,29
<i>E. coli</i>	9223B-Colilert	2525	Environmental Microbiology	32
Enterococcus	Enterolert	2520	Environmental Microbiology	34
Fecal Coliform	9222D-mFC	2530	Environmental Microbiology	32
Fluoride	4500C-F	1730	Inorganic Chemistry	24,29

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA)**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Gross Alpha	<b>900.0-ALPG</b>	2830	Radiologic Chemistry	<b>35</b>
Gross Beta	<b>900.0-BETG</b>	2840	Radiologic Chemistry	<b>36</b>
Gross Gamma	<b>901.1-GAMG</b>	2855	Radiologic Chemistry	<b>37</b>
Hardness	<b>HARD</b>	1755	Inorganic Chemistry	<b>21,29</b>
Heterotrophic Plate Count	<b>9215B-HPC</b>	2555	Environmental Microbiology	<b>32</b>
Iron	<b>200.7-FE</b>	1070	Inorganic Chemistry-Metals	<b>16</b>
Lead	<b>200.8-PB</b>	1075	Inorganic Chemistry-Metals	<b>16</b>
Magnesium	<b>200.7-MG</b>	1085	Inorganic Chemistry-Metals	<b>16</b>
Manganese	<b>200.8-MN</b>	1090	Inorganic Chemistry-Metals	<b>16</b>
Mercury	<b>245.1-HG</b>	1095	Inorganic Chemistry-Metals	<b>15,16</b>
Mercury	<b>200.8-HG</b>	1095	Inorganic Chemistry-Metals	<b>15,16</b>
Molybdenum	<b>200.8-MO</b>	1100	Inorganic Chemistry-Metals	<b>16</b>
Nickel	<b>200.8-NI</b>	1105	Inorganic Chemistry-Metals	<b>16</b>
Nitrate+Nitrite	<b>353.2-NO2+NO3</b>	1810	Inorganic Chemistry-Nutrients	<b>18,19</b>
Nitrite (only)	<b>353.2-NO2</b>	1840	Inorganic Chemistry-Nutrients	<b>18,19</b>
Oil and Grease	<b>5520-O/G</b>	1860	Organic Chemistry	<b>10</b>
Phosphate	<b>365.1-TPO4</b>	1870	Inorganic Chemistry-Nutrients	<b>17,19</b>
pH	<b>150.1-PH</b>	1900	Inorganic Chemistry	<b>20,29</b>
Potassium	<b>200.7-K</b>	1125	Inorganic Chemistry-Metals	<b>16</b>
Radium-226	<b>903.1-226R</b>	2965	Radiologic Chemistry	<b>36</b>
Radium-228	<b>904.0-226R</b>	2970	Radiologic Chemistry	<b>35</b>
Radon	<b>913.0-RN</b>	2980	Radiologic Chemistry	<b>37</b>
Selenium	<b>200.8-SE</b>	1140	Inorganic Chemistry-Metals	<b>16</b>
Silica	<b>370.1-SIO2</b>	1995	Inorganic Chemistry	<b>28</b>
Silver	<b>200.8-AG</b>	1150	Inorganic Chemistry-Metals	<b>16</b>

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA)**  
**Clean Water Act (CWA) – 608-PCB/OcPest**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Sodium	<b>200.7-NA</b>	1155	Inorganic Chemistry-Metals	<b>16</b>
Sulfate	<b>375.2-SO4</b>	2000	Inorganic Chemistry	<b>18,29</b>
Sulfide	<b>376.2-SULI</b>	2005	Inorganic Chemistry	<b>24</b>
Thallium	<b>200.8-TL</b>	1165	Inorganic Chemistry-Metals	<b>30</b>
TOC	<b>5310B-TOC</b>	2040	Inorganic Chemistry	<b>25</b>
Total Coliform	<b>9223B-Colilert</b>	2500	Environmental Microbiology	<b>32</b>
Total Coliform	<b>9222B-mENDO</b>	2500	Environmental Microbiology	<b>32</b>
Total Dissolved Solids(TDS)	<b>160.1-TDS</b>	1705	Inorganic Chemistry	<b>28,29</b>
Total Suspended Solids(TSS)	<b>160.2-TSS</b>	1955	Inorganic Chemistry	<b>28,29</b>
Turbidity	<b>180.1-TURB</b>	2055	Inorganic Chemistry	<b>26,29</b>
Uranium	<b>200.8-UUMS</b>	3035	Inorganic Chemistry-Metals	<b>30,35</b>
UV254	<b>5910B-UV254</b>	2060	Inorganic Chemistry	<b>25</b>
Vanadium	<b>200.8-V</b>	1185	Inorganic Chemistry-Metals	<b>16</b>
Zinc	<b>200.8-ZN</b>	1190	Inorganic Chemistry-Metals	<b>16</b>
4,4'-DDD	<b>608-PCB/OcPest</b>	7355	Organic Chemistry-PCB/OcPest	<b>10</b>
4,4'-DDE	<b>608-PCB/OcPest</b>	7360	Organic Chemistry-PCB/OcPest	<b>10</b>
4,4'-DDT	<b>608-PCB/OcPest</b>	7365	Organic Chemistry-PCB/OcPest	<b>10</b>
Aldrin	<b>608-PCB/OcPest</b>	7025	Organic Chemistry-PCB/OcPest	<b>10</b>
alpha-BHC	<b>608-PCB/OcPest</b>	7110	Organic Chemistry-PCB/OcPest	<b>10</b>
beta-BHC	<b>608-PCB/OcPest</b>	7115	Organic Chemistry-PCB/OcPest	<b>10</b>
Chlordane	<b>608-PCB/OcPest</b>	7240	Organic Chemistry-PCB/OcPest	<b>10</b>
delta-BHC	<b>608-PCB/OcPest</b>	7105	Organic Chemistry-PCB/OcPest	<b>10</b>
Dieldrin	<b>608-PCB/OcPest</b>	7470	Organic Chemistry-PCB/OcPest	<b>10</b>
Endosulfan I	<b>608-PCB/OcPest</b>	7510	Organic Chemistry-PCB/OcPest	<b>10</b>

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**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA) – 608-PCB/OcPest  
Clean Water Act (CWA) – 624-VOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Endosulfan II	<b>608-PCB/OcPest</b>	7515	Organic Chemistry-PCB/OcPest	<b>10</b>
Endosulfan sulfate	<b>608-PCB/OcPest</b>	7520	Organic Chemistry-PCB/OcPest	<b>10</b>
Endrin	<b>608-PCB/OcPest</b>	7540	Organic Chemistry-PCB/OcPest	<b>10</b>
Endrin aldehyde	<b>608-PCB/OcPest</b>	7530	Organic Chemistry-PCB/OcPest	<b>10</b>
gamma-BHC	<b>608-PCB/OcPest</b>	7120	Organic Chemistry-PCB/OcPest	<b>10</b>
Heptachlor	<b>608-PCB/OcPest</b>	7685	Organic Chemistry-PCB/OcPest	<b>10</b>
Heptachlor epoxide	<b>608-PCB/OcPest</b>	7690	Organic Chemistry-PCB/OcPest	<b>10</b>
Methoxychlor	<b>608-PCB/OcPest</b>	7810	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1016	<b>608-PCB/OcPest</b>	8880	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1221	<b>608-PCB/OcPest</b>	8885	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1232	<b>608-PCB/OcPest</b>	8890	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1242	<b>608-PCB/OcPest</b>	8895	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1248	<b>608-PCB/OcPest</b>	8900	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1254	<b>608-PCB/OcPest</b>	8905	Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1260	<b>608-PCB/OcPest</b>	8910	Organic Chemistry-PCB/OcPest	<b>10</b>
Toxaphene	<b>608-PCB/OcPest</b>	8250	Organic Chemistry-PCB/OcPest	<b>10</b>
1,1-Dichloroethane	<b>624-VOC</b>	4630	Organic Chemistry-VOC	<b>5</b>
1,1-Dichloroethene	<b>624-VOC</b>	4640	Organic Chemistry-VOC	<b>5</b>
1,1-Dichloropropene	<b>624-VOC</b>	4670	Organic Chemistry-VOC	<b>5</b>
1,1,1-Trichloroethane	<b>624-VOC</b>	5160	Organic Chemistry-VOC	<b>5</b>
1,1,1,2-Tetrachloroethane	<b>624-VOC</b>	5105	Organic Chemistry-VOC	<b>5</b>
1,1,2-Trichloroethane	<b>624-VOC</b>	5165	Organic Chemistry-VOC	<b>5</b>
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<b>624-VOC</b>	5195	Organic Chemistry-VOC	<b>5</b>
1,1,2,2-Tetrachloroethane	<b>624-VOC</b>	5110	Organic Chemistry-VOC	<b>5</b>

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA) – 624-VOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
1,2-Dibromo-3-chloropropane	<b>624-VOC</b>	4570	Organic Chemistry-VOC	5
1,2-Dichlorobenzene	<b>624-VOC</b>	4610	Organic Chemistry-VOC	5
1,2-Dichloroethane	<b>624-VOC</b>	4635	Organic Chemistry-VOC	5
1,2-Dichloropropane	<b>624-VOC</b>	4655	Organic Chemistry-VOC	5
1,2-Dichlorotoluene	<b>624-VOC</b>	4535	Organic Chemistry-VOC	5
1,2,3-Trichlorobenzene	<b>624-VOC</b>	5150	Organic Chemistry-VOC	5
1,2,3-Trichloropropane	<b>624-VOC</b>	5180	Organic Chemistry-VOC	5
1,2,4-Trichlorobenzene	<b>624-VOC</b>	5155	Organic Chemistry-VOC	5
1,2,4-Trimethylbenzene	<b>624-VOC</b>	5210	Organic Chemistry-VOC	5
1,3-Dichlorobenzene	<b>624-VOC</b>	4615	Organic Chemistry-VOC	5
1,3-Dichloropropane	<b>624-VOC</b>	4660	Organic Chemistry-VOC	5
1,3,5-Trimethylbenzene	<b>624-VOC</b>	5215	Organic Chemistry-VOC	5
1,4-Dichlorobenzene	<b>624-VOC</b>	4620	Organic Chemistry-VOC	5
1,4-Dichlorotoluene	<b>624-VOC</b>	4540	Organic Chemistry-VOC	5
1,4-Isopropyltoluene	<b>624-VOC</b>	4915	Organic Chemistry-VOC	5
2,2-Dichloropropane	<b>624-VOC</b>	4665	Organic Chemistry-VOC	5
Benzene	<b>624-VOC</b>	4375	Organic Chemistry-VOC	5
Bromobenzene	<b>624-VOC</b>	4385	Organic Chemistry-VOC	5
Bromochloromethane	<b>624-VOC</b>	4390	Organic Chemistry-VOC	5
Bromodichloromethane	<b>624-VOC</b>	4395	Organic Chemistry-VOC	5
Bromoform	<b>624-VOC</b>	4400	Organic Chemistry-VOC	5
Bromomethane	<b>624-VOC</b>	4950	Organic Chemistry-VOC	5
Carbon tetrachloride	<b>624-VOC</b>	4455	Organic Chemistry-VOC	5
Chlorobenzene	<b>624-VOC</b>	4475	Organic Chemistry-VOC	5
Chlorodibromomethane	<b>624-VOC</b>	4575	Organic Chemistry-VOC	5

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA) – 624-VOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Chloroethane	<b>624-VOC</b>	4485	Organic Chemistry-VOC	5
Chloroform	<b>624-VOC</b>	4505	Organic Chemistry-VOC	5
Chloromethane	<b>624-VOC</b>	4960	Organic Chemistry-VOC	5
cis-1,2-Dichloroethene	<b>624-VOC</b>	4645	Organic Chemistry-VOC	5
cis-1,3-Dichloropropene	<b>624-VOC</b>	4680	Organic Chemistry-VOC	5
Dibromomethane	<b>624-VOC</b>	4595	Organic Chemistry-VOC	5
Dichlorodifluoromethane	<b>624-VOC</b>	4625	Organic Chemistry-VOC	5
Ethylbenzene	<b>624-VOC</b>	4765	Organic Chemistry-VOC	5
Ethylene dibromide	<b>624-VOC</b>	4585	Organic Chemistry-VOC	5
Hexachlorobutadiene	<b>624-VOC</b>	4835	Organic Chemistry-VOC	5
Isopropylbenzene	<b>624-VOC</b>	4900	Organic Chemistry-VOC	5
Methylene chloride	<b>624-VOC</b>	4650	Organic Chemistry-VOC	5
MTBE	<b>624-VOC</b>	5000	Organic Chemistry-VOC	5
Naphthalene	<b>624-VOC</b>	6390	Organic Chemistry-VOC	5
n-Butylbenzene	<b>624-VOC</b>	4435	Organic Chemistry-VOC	5
n-Propylbenzene	<b>624-VOC</b>	5090	Organic Chemistry-VOC	5
sec-Butylbenzene	<b>624-VOC</b>	4440	Organic Chemistry-VOC	5
Styrene	<b>624-VOC</b>	5100	Organic Chemistry-VOC	5
tert-Butylbenzene	<b>624-VOC</b>	4445	Organic Chemistry-VOC	5
Tetrachloroethene (PCE)	<b>624-VOC</b>	5115	Organic Chemistry-VOC	5
Toluene	<b>624-VOC</b>	5140	Organic Chemistry-VOC	5
trans-1,2-Dichloroethene	<b>624-VOC</b>	4700	Organic Chemistry-VOC	5
trans-1,3-Dichloropropene	<b>624-VOC</b>	4685	Organic Chemistry-VOC	5
Trichloroethene (TCE)	<b>624-VOC</b>	5170	Organic Chemistry-VOC	5
Trichlorofluoromethane	<b>624-VOC</b>	5175	Organic Chemistry-VOC	5

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA) – 624-VOC  
Clean Water Act (CWA) – 625-SVOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Vinyl chloride	<b>624-VOC</b>	5235	Organic Chemistry-VOC	5
Xylene	<b>624-VOC</b>	5260	Organic Chemistry-VOC	5
1,2-Dichlorobenzene	<b>625-SVOC</b>	4610	Organic Chemistry-SVOC	6
1,2,4-Trichlorobenzene	<b>625-SVOC</b>	5155	Organic Chemistry-SVOC	6
1,3-Dichlorobenzene	<b>625-SVOC</b>	4615	Organic Chemistry-SVOC	6
1,4-Dichlorobenzene	<b>625-SVOC</b>	4620	Organic Chemistry-SVOC	6
2-Chloronaphthalene	<b>625-SVOC</b>	5795	Organic Chemistry-SVOC	6
2-Chlorophenol	<b>625-SVOC</b>	5800	Organic Chemistry-SVOC	6
2-Methyl naphthalene	<b>625-SVOC</b>	6385	Organic Chemistry-SVOC	6
2-Methyl phenol	<b>625-SVOC</b>	6400	Organic Chemistry-SVOC	6
2-Methyl-4,6-dinitrophenol	<b>625-SVOC</b>	6360	Organic Chemistry-SVOC	6
2-Nitroaniline	<b>625-SVOC</b>	6460	Organic Chemistry-SVOC	6
2-Nitrophenol	<b>625-SVOC</b>	6490	Organic Chemistry-SVOC	6
2,4-Dichlorophenol	<b>625-SVOC</b>	6000	Organic Chemistry-SVOC	6
2,4-Dimethylphenol	<b>625-SVOC</b>	6130	Organic Chemistry-SVOC	6
2,4-Dinitrophenol	<b>625-SVOC</b>	6175	Organic Chemistry-SVOC	6
2,4-Dinitrotoluene	<b>625-SVOC</b>	6185	Organic Chemistry-SVOC	6
2,4,6-Trichlorophenol	<b>625-SVOC</b>	6840	Organic Chemistry-SVOC	6
2,6-Dinitrotoluene	<b>625-SVOC</b>	6190	Organic Chemistry-SVOC	6
3-Methyl phenol	<b>625-SVOC</b>	6405	Organic Chemistry-SVOC	6
3-Nitroaniline	<b>625-SVOC</b>	6465	Organic Chemistry-SVOC	6
3,3'-Dichlorobenzidine	<b>625-SVOC</b>	5945	Organic Chemistry-SVOC	6
4-Bromophenyl phenyl ether	<b>625-SVOC</b>	5660	Organic Chemistry-SVOC	6
4-Chloroaniline	<b>625-SVOC</b>	5745	Organic Chemistry-SVOC	6

**PROGRAM SPECIFIC INDEXES****Clean Water Act (CWA) – 625-SVOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
4-Chlorophenyl phenyl ether	<b>625-SVOC</b>	5825	Organic Chemistry-SVOC	6
4-Chloro-3-methyl phenol	<b>625-SVOC</b>	5700	Organic Chemistry-SVOC	6
4-Methyl phenol	<b>625-SVOC</b>	6410	Organic Chemistry-SVOC	6
4-Nitroaniline	<b>625-SVOC</b>	6470	Organic Chemistry-SVOC	6
4-Nitrophenol	<b>625-SVOC</b>	6500	Organic Chemistry-SVOC	6
Acenaphthene	<b>625-SVOC</b>	5500	Organic Chemistry-SVOC	6
Acenaphthylene	<b>625-SVOC</b>	5505	Organic Chemistry-SVOC	6
Aniline	<b>625-SVOC</b>	5545	Organic Chemistry-SVOC	6
Anthracene	<b>625-SVOC</b>	5555	Organic Chemistry-SVOC	6
Benzidine	<b>625-SVOC</b>	5595	Organic Chemistry-SVOC	6
Benzo (a) anthracene	<b>625-SVOC</b>	5575	Organic Chemistry-SVOC	6
Benzo (a) pyrene	<b>625-SVOC</b>	5580	Organic Chemistry-SVOC	6
Benzo (b) fluoranthene	<b>625-SVOC</b>	5585	Organic Chemistry-SVOC	6
Benzo (g,h,i) perylene	<b>625-SVOC</b>	5590	Organic Chemistry-SVOC	6
Benzo (k) fluoranthene	<b>625-SVOC</b>	5600	Organic Chemistry-SVOC	6
Benzylbutylphthalate	<b>625-SVOC</b>	5670	Organic Chemistry-SVOC	6
Benzyl alcohol	<b>625-SVOC</b>	5630	Organic Chemistry-SVOC	6
Benzoic acid	<b>625-SVOC</b>	5610	Organic Chemistry-SVOC	6
bis (2-chloroethyl) ether	<b>625-SVOC</b>	5765	Organic Chemistry-SVOC	6
bis (2-chloroethoxy) methane	<b>625-SVOC</b>	5770	Organic Chemistry-SVOC	6
bis (2-chloroisopropyl) ether	<b>625-SVOC</b>	5780	Organic Chemistry-SVOC	6
bis (2-ethylhexyl) phthalate	<b>625-SVOC</b>	6065	Organic Chemistry-SVOC	6
Chrysene	<b>625-SVOC</b>	5855	Organic Chemistry-SVOC	6
Dibenzo (a,h) anthracene	<b>625-SVOC</b>	5895	Organic Chemistry-SVOC	6
Dibenzofuran	<b>625-SVOC</b>	5905	Organic Chemistry-SVOC	6

**PROGRAM SPECIFIC INDEXES**

**Clean Water Act (CWA) – 625-SVOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Diethyl phthalate	<b>625-SVOC</b>	6070	Organic Chemistry-SVOC	6
Dimethyl phthalate	<b>625-SVOC</b>	6135	Organic Chemistry-SVOC	6
Di-n-butyl phthalate	<b>625-SVOC</b>	5925	Organic Chemistry-SVOC	6
Di-n-octyl phthalate	<b>625-SVOC</b>	6200	Organic Chemistry-SVOC	6
Fluoranthene	<b>625-SVOC</b>	6265	Organic Chemistry-SVOC	6
Fluorene	<b>625-SVOC</b>	6270	Organic Chemistry-SVOC	6
Hexachlorobenzene	<b>625-SVOC</b>	6275	Organic Chemistry-SVOC	6
Hexachlorobutadiene	<b>625-SVOC</b>	4835	Organic Chemistry-SVOC	6
Hexachlorocyclopentadiene	<b>625-SVOC</b>	6285	Organic Chemistry-SVOC	6
Hexachloroethane	<b>625-SVOC</b>	4840	Organic Chemistry-SVOC	6
Indeno (1,2,3-cd) pyrene	<b>625-SVOC</b>	6315	Organic Chemistry-SVOC	6
Isophorone	<b>625-SVOC</b>	6320	Organic Chemistry-SVOC	6
n-Nitrosodimethylamine	<b>625-SVOC</b>	6530	Organic Chemistry-SVOC	6
n-Nitrosodiphenylamine	<b>625-SVOC</b>	6535	Organic Chemistry-SVOC	6
n-Nitrosodipropylamine	<b>625-SVOC</b>	6540	Organic Chemistry-SVOC	6
Naphthalene	<b>625-SVOC</b>	5005	Organic Chemistry-SVOC	6
Nitrobenzene	<b>625-SVOC</b>	5015	Organic Chemistry-SVOC	6
Pentachlorophenol	<b>625-SVOC</b>	6605	Organic Chemistry-SVOC	6
Phenanthrene	<b>625-SVOC</b>	6615	Organic Chemistry-SVOC	6
Phenol	<b>625-SVOC</b>	6625	Organic Chemistry-SVOC	6
Pyrene	<b>625-SVOC</b>	6665	Organic Chemistry-SVOC	6

**Bureau of Chemical and Environmental Services - Client Manual**

State of Utah Public Health Laboratory

**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8081-PCB/OcPest**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
4,4'-DDD	<b>8081-PCB/OcPest</b>	U060	Organic Chemistry-PCB/OcPest	<b>10</b>
4,4'-DDE	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
4,4'-DDT	<b>8081-PCB/OcPest</b>	U061	Organic Chemistry-PCB/OcPest	<b>10</b>
Aldrin	<b>8081-PCB/OcPest</b>	P005	Organic Chemistry-PCB/OcPest	<b>10</b>
alpha-BHC	<b>8081-PCB/OcPest</b>	U129	Organic Chemistry-PCB/OcPest	<b>10</b>
beta-BHC	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
Chlordane	<b>8081-PCB/OcPest</b>	D020	Organic Chemistry-PCB/OcPest	<b>10,12</b>
delta-BHC	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
Dieldrin	<b>8081-PCB/OcPest</b>	P037	Organic Chemistry-PCB/OcPest	<b>10</b>
Endosulfan I	<b>8081-PCB/OcPest</b>	P050	Organic Chemistry-PCB/OcPest	<b>10</b>
Endosulfan II	<b>8081-PCB/OcPest</b>	P050	Organic Chemistry-PCB/OcPest	<b>10</b>
Endosulfan sulfate	<b>8081-PCB/OcPest</b>	P050	Organic Chemistry-PCB/OcPest	<b>10</b>
Endrin	<b>8081-PCB/OcPest</b>	D012	Organic Chemistry-PCB/OcPest	<b>10,12</b>
Endrin aldehyde	<b>8081-PCB/OcPest</b>	D012	Organic Chemistry-PCB/OcPest	<b>10</b>
gamma-BHC (Lindane)	<b>8081-PCB/OcPest</b>	D013	Organic Chemistry-PCB/OcPest	<b>10,12</b>
Heptachlor	<b>8081-PCB/OcPest</b>	D031	Organic Chemistry-PCB/OcPest	<b>10,12</b>
Heptachlor epoxide	<b>8081-PCB/OcPest</b>	D031	Organic Chemistry-PCB/OcPest	<b>10,12</b>
Methoxychlor	<b>8081-PCB/OcPest</b>	D014	Organic Chemistry-PCB/OcPest	<b>10,12</b>
PCB-1016	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1221	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1232	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1242	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1248	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1254	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
PCB-1260	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>

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**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8081-PCB/OcPest  
Resource Conservation and Recovery Act (RCRA) – 8151-Herbicides**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
Toxaphene	<b>8081-PCB/OcPest</b>	D015	Organic Chemistry-PCB/OcPest	<b>10,12</b>
*Add-ons	<b>8081-PCB/OcPest</b>		Organic Chemistry-PCB/OcPest	<b>10</b>
2,4-D	<b>8151-Herbicides</b>	D016	Organic Chemistry-Herbicides	<b>7,12</b>
2,4,5-TP (Silvex)	<b>8151-Herbicides</b>	D017	Organic Chemistry-Herbicides	<b>7,12</b>
Dalapon	<b>8151-Herbicides</b>		Organic Chemistry-Herbicides	<b>7</b>
Dinoseb	<b>8151-Herbicides</b>	P020	Organic Chemistry-Herbicides	<b>7</b>
Pentachlorophenol	<b>8151-Herbicides</b>	D037	Organic Chemistry-Herbicides	<b>7,12</b>
Picloram	<b>8151-Herbicides</b>		Organic Chemistry-Herbicides	<b>7</b>
*Add-ons	<b>8151-Herbicides</b>		Organic Chemistry-Herbicides	<b>7</b>
1,1-Dichloroethane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,1-Dichloroethene	<b>8260-VOC</b>	D029	Organic Chemistry-VOC	<b>5,12</b>
1,1-Dichloropropene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,1,1-Trichloroethane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,1,1,2-Tetrachloroethane	<b>8260-VOC</b>	U208	Organic Chemistry-VOC	<b>5</b>
1,1,2-Trichloroethane	<b>8260-VOC</b>	U227	Organic Chemistry-VOC	<b>5</b>
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,1,2,2-Tetrachloroethane	<b>8260-VOC</b>	U209	Organic Chemistry-VOC	<b>5</b>
1,2-Dibromo-3-chloropropan	<b>e8260-VOC</b>	U066	Organic Chemistry-VOC	<b>5</b>
1,2-Dichlorobenzene	<b>8260-VOC</b>	U070	Organic Chemistry-VOC	<b>5</b>
1,2-Dichloroethane	<b>8260-VOC</b>	D028	Organic Chemistry-VOC	<b>5,12</b>
1,2-Dichloropropane	<b>8260-VOC</b>	U083	Organic Chemistry-VOC	<b>5</b>
1,2-Dichlorotoluene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,2,3-Trichlorobenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>

\*Tentative analysis by special request, record specific analyte on test request form and schedule at 801-883-4655

**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8260-VOC**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
1,2,3-Trichloropropane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,2,4-Trichlorobenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,2,4-Trimethylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,3-Dichlorobenzene	<b>8260-VOC</b>	U071	Organic Chemistry-VOC	<b>5</b>
1,3-Dichloropropane	<b>8260-VOC</b>	U084	Organic Chemistry-VOC	<b>5</b>
1,3,5-Trimethylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
1,4-Dichlorobenzene	<b>8260-VOC</b>	D027	Organic Chemistry-VOC	<b>5,12</b>
1,4-Dichlorotoluene	<b>8260-VOC</b>	U072	Organic Chemistry-VOC	<b>5</b>
1,4-Isopropyltoluene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
2,2-Dichloropropane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Benzene	<b>8260-VOC</b>	D018	Organic Chemistry-VOC	<b>5,12</b>
Bromobenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Bromochloromethane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Bromodichloromethane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Bromoform	<b>8260-VOC</b>	U225	Organic Chemistry-VOC	<b>5</b>
Bromomethane	<b>8260-VOC</b>	U029	Organic Chemistry-VOC	<b>5</b>
Carbon tetrachloride	<b>8260-VOC</b>	D019	Organic Chemistry-VOC	<b>5,12</b>
Chlorobenzene	<b>8260-VOC</b>	D021	Organic Chemistry-VOC	<b>5,12</b>
Chlorodibromomethane	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Chloroethane	<b>8260-VOC</b>	U045	Organic Chemistry-VOC	<b>5</b>
Chloroform	<b>8260-VOC</b>	D022	Organic Chemistry-VOC	<b>5,12</b>
Chloromethane	<b>8260-VOC</b>	U045	Organic Chemistry-VOC	<b>5</b>
cis-1,2-Dichloroethene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
cis-1,3-Dichloropropene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>

**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8260-VOC**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
Dibromomethane	<b>8260-VOC</b>	U068	Organic Chemistry-VOC	<b>5</b>
Dichlorodifluoromethane	<b>8260-VOC</b>	U075	Organic Chemistry-VOC	<b>5</b>
Ethylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Ethylene dibromide	<b>8260-VOC</b>	U067	Organic Chemistry-VOC	<b>5</b>
Hexachlorobutadiene	<b>8260-VOC</b>	D033	Organic Chemistry-VOC	<b>5,12</b>
Isopropylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Methyl ethyl ketone*	<b>8260-VOC</b>	D035	Organic Chemistry-VOC	<b>5,12</b>
Methylene chloride	<b>8260-VOC</b>	U080	Organic Chemistry-VOC	<b>5</b>
MTBE	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Naphthalene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
n-Butylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
n-Propylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
sec-Butylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Styrene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
tert-Butylbenzene	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>
Tetrachloroethene (PCE)	<b>8260-VOC</b>	D039	Organic Chemistry-VOC	<b>5,12</b>
Toluene	<b>8260-VOC</b>	U220	Organic Chemistry-VOC	<b>5</b>
trans-1,2-Dichloroethene	<b>8260-VOC</b>	U079	Organic Chemistry-VOC	<b>5</b>
trans-1,3-Dichloropropene	<b>8260-VOC</b>	U084	Organic Chemistry-VOC	<b>5</b>
Trichloroethene (TCE)	<b>8260-VOC</b>	D040	Organic Chemistry-VOC	<b>5,12</b>
Trichlorofluoromethane	<b>8260-VOC</b>	U121	Organic Chemistry-VOC	<b>5</b>
Vinyl chloride	<b>8260-VOC</b>	D043	Organic Chemistry-VOC	<b>5,12</b>
Xylene	<b>8260-VOC</b>	U239	Organic Chemistry-VOC	<b>5</b>
*Add-ons	<b>8260-VOC</b>		Organic Chemistry-VOC	<b>5</b>

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**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8270-SVOC**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
1,2-Dichlorobenzene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
1,2,4-Trichlorobenzene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
1,3-Dichlorobenzene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
1,4-Dichlorobenzene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
2-Chloronaphthalene	<b>8270-SVOC</b>	U047	Organic Chemistry-SVOC	<b>6</b>
2-Chlorophenol	<b>8270-SVOC</b>	U048	Organic Chemistry-SVOC	<b>6</b>
2-Methyl naphthalene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
2-Methyl phenol (o-Cresol)	<b>8270-SVOC</b>	D023	Organic Chemistry-SVOC	<b>6,12</b>
2-Methyl-4,6-dinitrophenol	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
2-Nitroaniline	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
2-Nitrophenol	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
2,4-Dichlorophenol	<b>8270-SVOC</b>	U081	Organic Chemistry-SVOC	<b>6</b>
2,4-Dimethylphenol	<b>8270-SVOC</b>	U101	Organic Chemistry-SVOC	<b>6</b>
2,4-Dinitrophenol	<b>8270-SVOC</b>	P048	Organic Chemistry-SVOC	<b>6</b>
2,4-Dinitrotoluene	<b>8270-SVOC</b>	D030	Organic Chemistry-SVOC	<b>6,12</b>
2,4,5-Trichlorophenol	<b>8270-SVOC</b>	D041	Organic Chemistry-SVOC	<b>6,12</b>
2,4,6-Trichlorophenol	<b>8270-SVOC</b>	D042	Organic Chemistry-SVOC	<b>6,12</b>
2,6-Dinitrotoluene	<b>8270-SVOC</b>	U106	Organic Chemistry-SVOC	<b>6</b>
3-Methyl phenol (m-Cresol)	<b>8270-SVOC</b>	D024	Organic Chemistry-SVOC	<b>6,12</b>
3-Nitroaniline	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
3,3'-Dichlorobenzidine	<b>8270-SVOC</b>	U073	Organic Chemistry-SVOC	<b>6</b>
4-Bromophenyl phenyl ether	<b>8270-SVOC</b>	U030	Organic Chemistry-SVOC	<b>6</b>
4-Chloroaniline	<b>8270-SVOC</b>	P024	Organic Chemistry-SVOC	<b>6</b>
4-Chlorophenyl phenyl ether	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
4-Chloro-3-methyl phenol	<b>8270-SVOC</b>	U039	Organic Chemistry-SVOC	<b>6</b>

**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8270-SVOC**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
4-Methyl phenol (p-Cresol)	<b>8270-SVOC</b>	D025	Organic Chemistry-SVOC	6,12
4-Nitroaniline	<b>8270-SVOC</b>	P077	Organic Chemistry-SVOC	6
4-Nitrophenol	<b>8270-SVOC</b>	U170	Organic Chemistry-SVOC	6
Acenaphthene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Acenaphthylene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Aniline	<b>8270-SVOC</b>	U012	Organic Chemistry-SVOC	6
Anthracene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzidine	<b>8270-SVOC</b>	U021	Organic Chemistry-SVOC	6
Benzo (a) anthracene	<b>8270-SVOC</b>	U018	Organic Chemistry-SVOC	6
Benzo (a) pyrene	<b>8270-SVOC</b>	U022	Organic Chemistry-SVOC	6
Benzo (b) fluoranthene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzo (g,h,i) perylene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzo (k) fluoranthene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzylbutylphthalate	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzyl alcohol	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Benzoic acid	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
bis (2-chloroethyl) ether	<b>8270-SVOC</b>	U025	Organic Chemistry-SVOC	6
bis (2-chloroethoxy) methane	<b>8270-SVOC</b>	U046	Organic Chemistry-SVOC	6
bis (2-chloroisopropyl) ether	<b>8270-SVOC</b>	U027	Organic Chemistry-SVOC	6
bis (2-ethylhexyl) phthalate	<b>8270-SVOC</b>	U028	Organic Chemistry-SVOC	6
Chrysene	<b>8270-SVOC</b>	U050	Organic Chemistry-SVOC	6
Dibenzo (a,h) anthracene	<b>8270-SVOC</b>	U063	Organic Chemistry-SVOC	6
Dibenzofuran	<b>8270-SVOC</b>		Organic Chemistry-SVOC	6
Diethyl phthalate	<b>8270-SVOC</b>	U088	Organic Chemistry-SVOC	6
Dimethyl phthalate	<b>8270-SVOC</b>	U102	Organic Chemistry-SVOC	6

**PROGRAM SPECIFIC INDEXES****Resource Conservation and Recovery Act (RCRA) – 8270-SVOC**

Analyte	Test Code	EPA HW No.	UPLH Unit	Page Number
Di-n-butyl phthalate	<b>8270-SVOC</b>	U069	Organic Chemistry-SVOC	<b>6</b>
Di-n-octyl phthalate	<b>8270-SVOC</b>	U107	Organic Chemistry-SVOC	<b>6</b>
Fluoranthene	<b>8270-SVOC</b>	U120	Organic Chemistry-SVOC	<b>6</b>
Fluorene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
Hexachlorobenzene	<b>8270-SVOC</b>	D032	Organic Chemistry-SVOC	<b>6,12</b>
Hexachlorobutadiene	<b>8270-SVOC</b>	D033	Organic Chemistry-SVOC	<b>6,12</b>
Hexachlorocyclopentadiene	<b>8270-SVOC</b>	U130	Organic Chemistry-SVOC	<b>6</b>
Hexachloroethane	<b>8270-SVOC</b>	D034	Organic Chemistry-SVOC	<b>6,12</b>
Ideno (1,2,3-cd) pyrene	<b>8270-SVOC</b>	U137	Organic Chemistry-SVOC	<b>6</b>
Isophorone	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
n-Nitrosodimethylamine	<b>8270-SVOC</b>	P082	Organic Chemistry-SVOC	<b>6</b>
n-Nitrosodiphenylamine	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
n-Nitrosodipropylamine	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
Naphthalene	<b>8270-SVOC</b>	U165	Organic Chemistry-SVOC	<b>6</b>
Nitrobenzene	<b>8270-SVOC</b>	D036	Organic Chemistry-SVOC	<b>6,12</b>
Pentachlorophenol	<b>8270-SVOC</b>	D037	Organic Chemistry-SVOC	<b>6,12</b>
Phenanthrene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
Phenol	<b>8270-SVOC</b>	U188	Organic Chemistry-SVOC	<b>6</b>
Pyrene	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>
*Pyridine	<b>8270-SVOC</b>	D038	Organic Chemistry-SVOC	<b>6,12</b>
*Add-ons	<b>8270-SVOC</b>		Organic Chemistry-SVOC	<b>6</b>

\*Tentative analysis by special request, record specific analyte on test request form and schedule at 801-883-4655

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA)**

Analyte	Test Code	NELAC Code	UPL Unit	Page Number
2,4-D	<b>515.1</b>	8545	Organic Chemistry-Herbicides	<b>7,8</b>
2,4,5-TP (Silvex)	<b>515.1</b>	8650	Organic Chemistry-Herbicides	<b>7,8</b>
3-Hydroxycarbofuran	<b>531.1</b>	7710	Organic Chemistry-Carbamates	<b>7,8</b>
Aeromonas	<b>1605</b>	UCMR	Environmental Microbiology	<b>34</b>
Aldicarb (Temik)	<b>531.1</b>	7010	Organic Chemistry-Carbamates	<b>7,8</b>
Aldicarb sulfone	<b>531.1</b>	7015	Organic Chemistry-Carbamates	<b>7,8</b>
Aldicarb sulfoxide	<b>531.1</b>	7020	Organic Chemistry-Carbamates	<b>7,8</b>
Alkalinity	<b>2320B-ALK</b>	1505	Inorganic Chemistry	<b>25,29</b>
Aluminum	<b>200.8-AL</b>	1000	Inorganic Chemistry-Metals	<b>16</b>
Ammonia	<b>350.3-NH3</b>	1515	Inorganic Chemistry-Nutrients	<b>17,19</b>
Antimony	<b>200.8-SB</b>	1005	Inorganic Chemistry-Metals	<b>16</b>
Arsenic	<b>200.8-AS</b>	1010	Inorganic Chemistry-Metals	<b>15,16</b>
Barium	<b>200.8-BA</b>	1015	Inorganic Chemistry-Metals	<b>16</b>
Beryllium	<b>200.8-BE</b>	1020	Inorganic Chemistry-Metals	<b>16</b>
Boron	<b>200.7-B</b>	1025	Inorganic Chemistry-Metals	<b>16</b>
Bromate	<b>300.0-BRO3</b>	1535	Inorganic Chemistry	<b>22</b>
Bromide	<b>300.0-BRIC</b>	1540	Inorganic Chemistry	<b>22</b>
Bromodichloromethane	<b>524.2-THM</b>	4395	Organic Chemistry-THM	<b>4</b>
Bromoform	<b>524.2-THM</b>	4400	Organic Chemistry-THM	<b>4</b>
Cadmium	<b>200.8-CD</b>	1030	Inorganic Chemistry-Metals	<b>16</b>
Calcium	<b>200.7-CA</b>	1035	Inorganic Chemistry-Metals	<b>16</b>
Carbaryl (Sevin)	<b>531.1</b>	7195	Organic Chemistry-Carbamates	<b>7,8</b>
Carbofuran (Furadan)	<b>531.1</b>	7205	Organic Chemistry-Carbamates	<b>7,8</b>
Chlorate	<b>300.0-CLO3</b>	1570	Inorganic Chemistry	<b>22</b>
Chloride	<b>325.2-CL</b>	1575	Inorganic Chemistry	<b>22,29</b>

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA)**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Chloride	<b>300.0-CLIC</b>	1575	Inorganic Chemistry	<b>22,29</b>
Chlorite	<b>300.0-CLO2</b>	1595	Inorganic Chemistry	<b>22</b>
Chlorodibromomethane	<b>524.2-THM</b>	4575	Organic Chemistry-THM	<b>4</b>
Chloroform	<b>524.2-THM</b>	4505	Organic Chemistry-THM	<b>4</b>
Chromium	<b>200.8-CR</b>	1040	Inorganic Chemistry-Metals	<b>16</b>
Chromium-IV	<b>3500CD-CR6+</b>	1045	Inorganic Chemistry	<b>30</b>
Cobalt	<b>200.8-CO</b>	1050	Inorganic Chemistry-Metals	<b>16</b>
Color	<b>110.2-COLR</b>	1605	Inorganic Chemistry	<b>13,21</b>
Conductivity	<b>120.1-COND</b>	1610	Inorganic Chemistry	<b>20,29</b>
Copper	<b>200.8-CU</b>	1055	Inorganic Chemistry-Metals	<b>16</b>
Corrosivity	<b>CORR</b>	1615	Inorganic Chemistry	<b>13,20</b>
<i>Cryptosporidium</i>	<b>1623</b>	2510	Environmental Microbiology	<b>33</b>
Cyanide	<b>335.4-CNCL</b>	1635	Inorganic Chemistry	<b>23</b>
Dalapon	<b>515.1</b>	8555	Organic Chemistry-Herbicides	<b>7,8</b>
Dibromoacetic acid	<b>6251B-HAA</b>	9357	Organic Chemistry-HAA	<b>4</b>
Dichloroacetic acid	<b>6251B-HAA</b>	9360	Organic Chemistry-HAA	<b>4</b>
Dinoseb	<b>515.1</b>	8620	Organic Chemistry-Herbicides	<b>7,8</b>
<i>E. coli</i>	<b>9223B-Colilert</b>	2525	Environmental Microbiology	<b>32</b>
<i>Enterococcus</i>	<b>Enterolert</b>	2520	Environmental Microbiology	<b>34</b>
Fecal Coliform	<b>9221E-EC</b>	2530	Environmental Microbiology	<b>32</b>
Fluoride	<b>4500C-F</b>	1730	Inorganic Chemistry	<b>24,29</b>
<i>Giardia</i>	<b>1623</b>	2545	Environmental Microbiology	<b>33</b>
Gross Alpha	<b>900.0-ALPG</b>	2830	Radiologic Chemistry	<b>35</b>
Gross Beta	<b>900.0-BETG</b>	2840	Radiologic Chemistry	<b>36</b>
Gross Gamma	<b>901.1-GAMG</b>	2855	Radiologic Chemistry	<b>37</b>

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA)**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Hardness	<b>HARD</b>	1755	Inorganic Chemistry	<b>21,29</b>
Heterotrophic Plate Count	<b>9215B-HPC</b>	2555	Environmental Microbiology	<b>32</b>
Iron	<b>200.7-FE</b>	1070	Inorganic Chemistry-Metals	<b>16</b>
Lead	<b>200.8-PB</b>	1075	Inorganic Chemistry-Metals	<b>16</b>
<i>Legionella</i>	<b>9260J</b>	OSHA	Environmental Microbiology	<b>34</b>
Magnesium	<b>200.7-MG</b>	1085	Inorganic Chemistry-Metals	<b>16</b>
Manganese	<b>200.8-MN</b>	1090	Inorganic Chemistry-Metals	<b>16</b>
Mercury	<b>245.1-HG</b>	1095	Inorganic Chemistry-Metals	<b>15,16</b>
Methomyl	<b>531.1</b>	7805	Organic Chemistry-Carbamates	<b>7,8</b>
Molybdenum	<b>200.8-MO</b>	1100	Inorganic Chemistry-Metals	<b>16</b>
Monobromoacetic acid	<b>6215B-HAA</b>	9312	Organic Chemistry-HAA	<b>4</b>
Monochloroacetic acid	<b>6215B-HAA</b>	9336	Organic Chemistry-HAA	<b>4</b>
Nickel	<b>200.8-NI</b>	1105	Inorganic Chemistry-Metals	<b>16</b>
Nitrate+Nitrite	<b>353.2-NO2+NO3</b>	1810	Inorganic Chemistry-Nutrients	<b>18,19</b>
Nitrite (only)	<b>353.2-NO2</b>	1840	Inorganic Chemistry-Nutrients	<b>18,19</b>
Odor	<b>140.1-ODOR</b>	1855	Inorganic Chemistry	<b>13,21</b>
Oxamyl (Vydate)	<b>531.1</b>	7940	Organic Chemistry-Carbamates	<b>7,8</b>
Pentachlorophenol	<b>515.1</b>	6605	Organic Chemistry-Herbicides	<b>7,8</b>
Perchlorate	<b>314.0-CLO4</b>	1895	Inorganic Chemistry	<b>23</b>
pH	<b>150.1-PH</b>	1900	Inorganic Chemistry	<b>20,29</b>
Phosphate	<b>365.1-TPO4</b>	1870	Inorganic Chemistry-Nutrients	<b>17,19</b>
Picloram	<b>515.1</b>	8645	Organic Chemistry-Herbicides	<b>7,8</b>
Potassium	<b>200.7-K</b>	1125	Inorganic Chemistry-Metals	<b>16</b>
Radium-226	<b>903.1-226R</b>	2965	Radiologic Chemistry	<b>36</b>
Radium-228	<b>904.0-226R</b>	2970	Radiologic Chemistry	<b>35</b>

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA)**  
**Safe Drinking Water Act (SDWA) – 524.2-VOC**

Analyte	Test Code	NELAC Code	UPHL Unit	Page Number
Radon	<b>913.0-RN</b>	2980	Radiologic Chemistry	<b>37</b>
Selenium	<b>200.8-SE</b>	1140	Inorganic Chemistry-Metals	<b>16</b>
Silica	<b>370.1-SIO2</b>	1995	Inorganic Chemistry	<b>28</b>
Silver	<b>200.8-AG</b>	1150	Inorganic Chemistry-Metals	<b>16</b>
Sodium	<b>200.7-NA</b>	1155	Inorganic Chemistry-Metals	<b>16</b>
Sulfate	<b>300.0-SO4C</b>	2000	Inorganic Chemistry	<b>18,29</b>
Sulfide	<b>376.2-SULI</b>	2005	Inorganic Chemistry	<b>24</b>
Thallium	<b>200.8-TL</b>	1165	Inorganic Chemistry-Metals	<b>30</b>
TOC	<b>5310B-TOC</b>	2040	Inorganic Chemistry	<b>25</b>
Total Coliform	<b>9223B-Colilert</b>	2500	Environmental Microbiology	<b>32</b>
Total Coliform	<b>9222B-mENDO</b>	2500	Environmental Microbiology	<b>32</b>
Total Dissolved Solids(TDS)	<b>160.1-TDS</b>	1705	Inorganic Chemistry	<b>28,29</b>
Total Suspended Solids(TSS)	<b>160.2-TSS</b>	1955	Inorganic Chemistry	<b>28,29</b>
Trichloroacetic acid	<b>6251B-HAA</b>	9642	Organic Chemistry-HAA	<b>4</b>
Turbidity	<b>180.1-TURB</b>	2055	Inorganic Chemistry	<b>26,29</b>
Uranium	<b>200.8-UUMS</b>	3035	Inorganic Chemistry-Metals	<b>30,35</b>
UV254	<b>5910B-UV254</b>	2060	Inorganic Chemistry	<b>25</b>
Vanadium	<b>200.8-V</b>	1185	Inorganic Chemistry-Metals	<b>16</b>
Zinc	<b>200.8-ZN</b>	1190	Inorganic Chemistry-Metals	<b>16</b>
1,1-Dichloroethane	<b>524.2-VOC</b>	4630	Organic Chemistry-VOC	<b>5,8</b>
1,1-Dichloroethene	<b>524.2-VOC</b>	4640	Organic Chemistry-VOC	<b>5,8</b>
1,1-Dichloropropene	<b>524.2-VOC</b>	4670	Organic Chemistry-VOC	<b>5,8</b>
1,1,1-Trichloroethane	<b>524.2-VOC</b>	5160	Organic Chemistry-VOC	<b>5,8</b>
1,1,2-Trichloroethane	<b>524.2-VOC</b>	5165	Organic Chemistry-VOC	<b>5,8</b>

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA) – 524.2-VOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
1,1,1,2-Tetrachloroethane	<b>524.2-VOC</b>	5105	Organic Chemistry-VOC	<b>5,8</b>
1,1,2,2-Tetrachloroethane	<b>524.2-VOC</b>	5110	Organic Chemistry-VOC	<b>5,8</b>
1,2-Dibromo-3-chloropropane	<b>524.2-VOC</b>	4570	Organic Chemistry-VOC	<b>5,8</b>
1,2-Dichlorobenzene	<b>524.2-VOC</b>	4610	Organic Chemistry-VOC	<b>5,8</b>
1,2-Dichloroethane	<b>524.2-VOC</b>	4635	Organic Chemistry-VOC	<b>5,8</b>
1,2-Dichloropropane	<b>524.2-VOC</b>	4655	Organic Chemistry-VOC	<b>5,8</b>
1,2-Dichlorotoluene	<b>524.2-VOC</b>	4535	Organic Chemistry-VOC	<b>5,8</b>
1,2,3-Trichlorobenzene	<b>524.2-VOC</b>	5150	Organic Chemistry-VOC	<b>5,8</b>
1,2,3-Trichloropropane	<b>524.2-VOC</b>	5180	Organic Chemistry-VOC	<b>5,8</b>
1,2,4-Trichlorobenzene	<b>524.2-VOC</b>	5155	Organic Chemistry-VOC	<b>5,8</b>
1,2,4-Trimethylbenzene	<b>524.2-VOC</b>	5210	Organic Chemistry-VOC	<b>5,8</b>
1,3-Dichlorobenzene	<b>524.2-VOC</b>	4615	Organic Chemistry-VOC	<b>5,8</b>
1,3-Dichloropropane	<b>524.2-VOC</b>	4660	Organic Chemistry-VOC	<b>5,8</b>
1,3,5-Trimethylbenzene	<b>524.2-VOC</b>	5215	Organic Chemistry-VOC	<b>5,8</b>
1,4-Dichlorobenzene	<b>524.2-VOC</b>	4620	Organic Chemistry-VOC	<b>5,8</b>
1,4-Dichlorotoluene	<b>524.2-VOC</b>	4540	Organic Chemistry-VOC	<b>5,8</b>
1,4-Isopropyltoluene	<b>524.2-VOC</b>	4915	Organic Chemistry-VOC	<b>5,8</b>
2,2-Dichloropropane	<b>524.2-VOC</b>	4655	Organic Chemistry-VOC	<b>5,8</b>
Benzene	<b>524.2-VOC</b>	4375	Organic Chemistry-VOC	<b>5,8</b>
Bromobenzene	<b>524.2-VOC</b>	4385	Organic Chemistry-VOC	<b>5,8</b>
Bromochloromethane	<b>524.2-VOC</b>	4390	Organic Chemistry-VOC	<b>5,8</b>
Bromodichloromethane	<b>524.2-VOC</b>	4395	Organic Chemistry-VOC	<b>5,8</b>
Bromoform	<b>524.2-VOC</b>	4400	Organic Chemistry-VOC	<b>5,8</b>
Bromomethane	<b>524.2-VOC</b>	4950	Organic Chemistry-VOC	<b>5,8</b>
Carbon tetrachloride	<b>524.2-VOC</b>	4455	Organic Chemistry-VOC	<b>5,8</b>

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**Safe Drinking Water Act (SDWA) – 524.2-VOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Chlorobenzene	<b>524.2-VOC</b>	4475	Organic Chemistry-VOC	<b>5,8</b>
Chlorodibromomethane	<b>524.2-VOC</b>	4575	Organic Chemistry-VOC	<b>5,8</b>
Chloroethane	<b>524.2-VOC</b>	4485	Organic Chemistry-VOC	<b>5,8</b>
Chloroform	<b>524.2-VOC</b>	4505	Organic Chemistry-VOC	<b>5,8</b>
Chloromethane	<b>524.2-VOC</b>	4960	Organic Chemistry-VOC	<b>5,8</b>
cis-1,2-Dichloroethene	<b>524.2-VOC</b>	4645	Organic Chemistry-VOC	<b>5,8</b>
cis-1,3-Dichloropropene	<b>524.2-VOC</b>	4680	Organic Chemistry-VOC	<b>5,8</b>
Dibromomethane	<b>524.2-VOC</b>	4595	Organic Chemistry-VOC	<b>5,8</b>
Dichlorodifluoromethane	<b>524.2-VOC</b>	4625	Organic Chemistry-VOC	<b>5,8</b>
Ethylbenzene	<b>524.2-VOC</b>	4765	Organic Chemistry-VOC	<b>5,8</b>
Ethylene dibromide	<b>524.2-VOC</b>	4585	Organic Chemistry-VOC	<b>5,8</b>
Hexachlorobutadiene	<b>524.2-VOC</b>	4835	Organic Chemistry-VOC	<b>5,8</b>
Isopropylbenzene	<b>524.2-VOC</b>	4900	Organic Chemistry-VOC	<b>5,8</b>
Methylene chloride	<b>524.2-VOC</b>	4650	Organic Chemistry-VOC	<b>5,8</b>
MTBE	<b>524.2-VOC</b>	5000	Organic Chemistry-VOC	<b>5,8</b>
Naphthalene	<b>524.2-VOC</b>	6390	Organic Chemistry-VOC	<b>5,8</b>
n-Butylbenzene	<b>524.2-VOC</b>	4435	Organic Chemistry-VOC	<b>5,8</b>
n-Propylbenzene	<b>524.2-VOC</b>	5090	Organic Chemistry-VOC	<b>5,8</b>
sec-Butylbenzene	<b>524.2-VOC</b>	4440	Organic Chemistry-VOC	<b>5,8</b>
Styrene	<b>524.2-VOC</b>	5100	Organic Chemistry-VOC	<b>5,8</b>
tert-Butylbenzene	<b>524.2-VOC</b>	4445	Organic Chemistry-VOC	<b>5,8</b>
Tetrachloroethene (PCE)	<b>524.2-VOC</b>	5115	Organic Chemistry-VOC	<b>5,8</b>
Toluene	<b>524.2-VOC</b>	5140	Organic Chemistry-VOC	<b>5,8</b>
trans-1,2-Dichloroethene	<b>524.2-VOC</b>	4700	Organic Chemistry-VOC	<b>5,8</b>
trans-1,3-Dichloropropene	<b>524.2-VOC</b>	4685	Organic Chemistry-VOC	<b>5,8</b>

**PROGRAM SPECIFIC INDEXES**

**Safe Drinking Water Act (SDWA) – 524.2-VOC  
Safe Drinking Water Act (SDWA) – 525.2-SVOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Trichloroethene (TCE)	<b>524.2-VOC</b>	5170	Organic Chemistry-VOC	<b>5,8</b>
Trichlorofluoromethane	<b>524.2-VOC</b>	5175	Organic Chemistry-VOC	<b>5,8</b>
Vinyl chloride	<b>524.2-VOC</b>	5235	Organic Chemistry-VOC	<b>5,8</b>
Xylene	<b>524.2-VOC</b>	5260	Organic Chemistry-VOC	<b>5,8</b>
2,4-Dinitrotoluene	<b>525.2-SVOC</b>	6185	Organic Chemistry-SVOC	<b>6,8</b>
2,6-Dinitrotoluene	<b>525.2-SVOC</b>	6190	Organic Chemistry-SVOC	<b>6,8</b>
4,4'-DDE	<b>525.2-SVOC</b>	7360	Organic Chemistry-SVOC	<b>6,8</b>
Acetochlor	<b>525.2-SVOC</b>	4310	Organic Chemistry-SVOC	<b>6,8</b>
Alachlor	<b>525.2-SVOC</b>	7005	Organic Chemistry-SVOC	<b>6,8</b>
Aldrin	<b>525.2-SVOC</b>	7025	Organic Chemistry-SVOC	<b>6,8</b>
alpha-Chlordane	<b>525.2-SVOC</b>	7240	Organic Chemistry-SVOC	<b>6,8</b>
Atrazine	<b>525.2-SVOC</b>	7065	Organic Chemistry-SVOC	<b>6,8</b>
bis (2-ethylhexyl) adipate	<b>525.2-SVOC</b>	6062	Organic Chemistry-SVOC	<b>6,8</b>
bis (2-ethylhexyl) phthalate	<b>525.2-SVOC</b>	6065	Organic Chemistry-SVOC	<b>6,8</b>
Benzo (a) pyrene	<b>525.2-SVOC</b>	5580	Organic Chemistry-SVOC	<b>6,8</b>
Bromocil	<b>525.2-SVOC</b>	7130	Organic Chemistry-SVOC	<b>6,8</b>
Butachlor	<b>525.2-SVOC</b>	7160	Organic Chemistry-SVOC	<b>6,8</b>
Chlorobiphenyl	<b>525.2-SVOC</b>	9105	Organic Chemistry-SVOC	<b>6,8</b>
Cyanazine	<b>525.2-SVOC</b>	7340	Organic Chemistry-SVOC	<b>6,8</b>
Dichlorobiphenyl	<b>525.2-SVOC</b>	8920	Organic Chemistry-SVOC	<b>6,8</b>
Dieldrin	<b>525.2-SVOC</b>	7470	Organic Chemistry-SVOC	<b>6,8</b>
Endrin	<b>525.2-SVOC</b>	7540	Organic Chemistry-SVOC	<b>6,8</b>
EPTC	<b>525.2-SVOC</b>	7555	Organic Chemistry-SVOC	<b>6,8</b>
gamma-Chlordane	<b>525.2-SVOC</b>	7245	Organic Chemistry-SVOC	<b>6,8</b>

**PROGRAM SPECIFIC INDEXES****Safe Drinking Water Act (SDWA) – 525.2-SVOC**

Analyte	Test Code	NELAC Code	UPLH Unit	Page Number
Heptachlor	<b>525.2-SVOC</b>	7685	Organic Chemistry-SVOC	<b>6,8</b>
Heptachlor epoxide	<b>525.2-SVOC</b>	7690	Organic Chemistry-SVOC	<b>6,8</b>
Heptachlorobiphenyl	<b>525.2-SVOC</b>	9065	Organic Chemistry-SVOC	<b>6,8</b>
Hexachlorobenzene	<b>525.2-SVOC</b>	6275	Organic Chemistry-SVOC	<b>6,8</b>
Hexachlorobiphenyl	<b>525.2-SVOC</b>	9020	Organic Chemistry-SVOC	<b>6,8</b>
Hexachlorocyclopentadiene	<b>525.2-SVOC</b>	6285	Organic Chemistry-SVOC	<b>6,8</b>
Lindane (gamma-BHC)	<b>525.2-SVOC</b>	7120	Organic Chemistry-SVOC	<b>6,8</b>
Methoxychlor	<b>525.2-SVOC</b>	7810	Organic Chemistry-SVOC	<b>6,8</b>
Metolachlor	<b>525.2-SVOC</b>	7835	Organic Chemistry-SVOC	<b>6,8</b>
Metribuzin	<b>525.2-SVOC</b>	7845	Organic Chemistry-SVOC	<b>6,8</b>
Molinate	<b>525.2-SVOC</b>	7875	Organic Chemistry-SVOC	<b>6,8</b>
Octachlorobiphenyl	<b>525.2-SVOC</b>	9090	Organic Chemistry-SVOC	<b>6,8</b>
Pentachlorobiphenyl	<b>525.2-SVOC</b>	8975	Organic Chemistry-SVOC	<b>6,8</b>
Pentachlorophenol	<b>525.2-SVOC</b>	6605	Organic Chemistry-SVOC	<b>6,8</b>
Prometon	<b>525.2-SVOC</b>	8035	Organic Chemistry-SVOC	<b>6,8</b>
Propachlor	<b>525.2-SVOC</b>	8045	Organic Chemistry-SVOC	<b>6,8</b>
Simazine	<b>525.2-SVOC</b>	8125	Organic Chemistry-SVOC	<b>6,8</b>
Terbacil	<b>525.2-SVOC</b>	8180	Organic Chemistry-SVOC	<b>6,8</b>
Tetrachlorobiphenyl	<b>525.2-SVOC</b>	8945	Organic Chemistry-SVOC	<b>6,8</b>
trans-Nonachlor	<b>525.2-SVOC</b>	7925	Organic Chemistry-SVOC	<b>6,8</b>
Trichlorobiphenyl	<b>525.2-SVOC</b>	8930	Organic Chemistry-SVOC	<b>6,8</b>
Trifuralin	<b>525.2-SVOC</b>	8295	Organic Chemistry-SVOC	<b>6,8</b>
Toxaphene	<b>525.2-SVOC</b>	8250	Organic Chemistry-SVOC	<b>6,8</b>

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## INSTRUCTIONS

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### **USE OF TEST REQUEST FORMS**

When filling out test request forms the following fields of information must be completed for proper identification of samples at time of receipt:

**System Name / Agency Name**

**System Number / Agency Code**

**Cost Code / Project Code**

**Contact Information**

(phone number is required)

**Person Submitting Samples**

(point of contact for clarifications)

**Billing Information**

(if submitting samples for first time or if updates are needed)

If you are unsure of your system name and number or agency code, please contact the laboratory prior to sample submission at 801-584-8400 or for drinking water samples contact the Division of Drinking Water at 801-536-4200. If you do not have a system number and have not submitted samples to the laboratory before, a system number will be assigned at time of sample receipt.

Short lists of Agency Codes, Cost Codes / Project Codes, Sample Source Codes, and Sample Type Codes are referenced on page 64. Source and Type codes may be recorded in comments field. If you do not know which cost code or project code applies to your samples, please contact the laboratory.

### **USE OF CHAIN OF CUSTODY**

When submitting chain of custody samples, please complete the following steps to ensure proper preservation of sample integrity:

**Place Seals on Sample Container Lid or Cap**

(must be initialed and dated at time of collection)

**Identify Continuous Sample Possession**

(signatures for dispatch, courier, relinquish, and so forth)  
located at bottom of chain-of-custody form

**Verify Laboratory Receipt**

(obtain copy of form when signed by DLS staff at time of receipt)

**Bureau of Chemical and Environmental Services - Client Manual**

State of Utah Public Health Laboratory

**INSTRUCTIONS****AGENCY CODES****COST CODES / PROJECT CODES**

UDAQ	Utah Division of Air Quality	321
UDAQ	Air Lead High Volume Study	731
UDRC	Utah Division of Radiation Control	342
UDRC	Utah Division of Radiation Control (Mixed Waste)	343
UDWQ	Utah Division of Water Quality (General)	350
UDWQ	Clean Lakes Project	351
UDWQ	Ground Water Permits	352
UDWQ	Ground Water Oversight	353
UDDW	Utah Division of Drinking Water	361
UDSHW	Utah Division of Solid and Hazardous Waste	365
UDER	Utah Division of Environmental Response & Remediation	367
<b>Public Drinking Water Systems</b>		361B
<b>Alliance Drinking Water Systems</b>		366
SLWQ	Salt Lake Valley Health Department	900
UCHD3	Utah County Health Department	900
WMHD9	Weber-Morgan Health Department	900
DCHD6	Davis County Health Department	900
TCHD	Tooele County Health Department	900
SWHC	Southwest Utah Public Health Department	900
BRHL	Bear River District Health Department	900
SEHP	Southeast Utah Public Health Department	900
CUHR	Central Utah Public Health Department	900
SCHD1	Summit County Health Department	900
WCHD3	Wasatch County Health Department	900
<b>General Testing, Billing Direct to Customer</b>		900B

**SAMPLE SOURCE CODES**

1	Spring
2	Well
3	Stream
4	Lake
7	Pipe/Effluent
20	Influent
22	Primary Clarifier
24	Trickling Filter
26	Secondary Clarifier
30	Above UV
31	Below UV
32	Injection Well
33	Bat Point
14	Other

**SAMPLE TYPE CODES**

4	Grab Sample
8	8 hr Composite
9	24 hr Composite
15	6 hr Composite
21	Lake Surface
22	Lake
25	Lake Mid Depth
29	Lake Bottom
30	Sludge
40	Sediment
50	Soil
60	Air
70	Tissue
80	Clothing



Utah

# Department of Health

## Bureau of Chemical and Environmental Services

46 North Medical Drive, Salt Lake City, UT 84113-1105

Phone 801-584-8400 Fax 801-584-8251

URL <http://health.utah.gov/els/envsrv>

- Hand delivered  
 Shipped samples  
 Cooler returned

System/Agency Name:			System/Agency Number:	Cost/Project Code:	Received Date and Time:						
<b>REPORTING/CONTACT</b> Attn: _____ Address: _____ City, State, ZIP: _____ Phone: _____ Fax: _____ Email: _____ Submitted by: _____			<b>BILLING (list if different)</b> Special Code: _____ Attn: _____ Address: _____ City, State, ZIP: _____ Phone: _____ Fax: _____		Receipt temperature	Receipt pH	Sample Receipt Conditions COOLANT / NO COOLANT Yes No <input type="checkbox"/> Documentation complete <input type="checkbox"/> Temperature within-range <input type="checkbox"/> Within holding time <input type="checkbox"/> Proper containers and in-date <input type="checkbox"/> Containers intact <input type="checkbox"/> Acceptable pH <input type="checkbox"/> N/A				
COLLECTION POINT DESCRIPTION	COLLECTED BY (initials)	COLLECTED DATE (mm/dd/yy)	COLLECTED TIME (24 hour)	COMMENTS	LAB NUMBER						
<b>REQUESTED TESTS (Check appropriate box and fill in additional information if required)</b>											
<b>ORGANIC CHEMISTRY</b> <input type="checkbox"/> BTEX N <input type="checkbox"/> Carbamates <input type="checkbox"/> Ethylene/Propylene Glycols <input type="checkbox"/> HAA <input type="checkbox"/> Herbicides <input type="checkbox"/> Oil and Grease <input type="checkbox"/> Pesticides/SVOCs (circle: 525.2, 625 or 8270)* <input type="checkbox"/> Phase II / Phase V* <input type="checkbox"/> PCB/OcPest (circle: 608 or 8081)* <input type="checkbox"/> Surfactants <input type="checkbox"/> TPH <input type="checkbox"/> RCRA TCLP-Organics* <input type="checkbox"/> THM <input type="checkbox"/> VOCs (circle: 524.2, 624* or 8260*) <input type="checkbox"/> Geosmin and MIB (525.2-Odor) <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____ <input type="checkbox"/> Other: _____			<b>INORGANIC CHEMISTRY</b> <input type="checkbox"/> Alkalinity <input type="checkbox"/> Ammonia <input type="checkbox"/> Annual Inorganics and Metals (Type 9) <input type="checkbox"/> BOD <input type="checkbox"/> Bromate* <input type="checkbox"/> Bromide* <input type="checkbox"/> COD <input type="checkbox"/> Chemistry (circle: Type 2 or Type 3) <input type="checkbox"/> Chlorate* <input type="checkbox"/> Chloride <input type="checkbox"/> Chlorophyll-A (volume filtered: _____) <input type="checkbox"/> Chromium-VI* <input type="checkbox"/> Color <input type="checkbox"/> Conductivity <input type="checkbox"/> Corrosivity <input type="checkbox"/> Cyanide <input type="checkbox"/> Fluoride <input type="checkbox"/> Hardness <input type="checkbox"/> Lead and Copper (Type 8) <input type="checkbox"/> New Drinking Water Source (Type 7)* <input type="checkbox"/> Nitrate and Nitrite <input type="checkbox"/> Nitrite (only)* <input type="checkbox"/> Nutrients, Total (circle: Type 2, Type 4 or Type 6) <input type="checkbox"/> Nutrients, Dissolved (Type 9) <input type="checkbox"/> Odor (TON) <input type="checkbox"/> Perchlorate <input type="checkbox"/> pH <input type="checkbox"/> Phosphate <input type="checkbox"/> Silica <input type="checkbox"/> Sulfate <input type="checkbox"/> Sulfide <input type="checkbox"/> TDS <input type="checkbox"/> TSS			<b>RADIOLOGIC CHEMISTRY</b> <input type="checkbox"/> TOC <input type="checkbox"/> UV254 <input type="checkbox"/> Turbidity <input type="checkbox"/> Metals, Total (circle: Type 7 or Type 9) <input type="checkbox"/> Metals, Dissolved (circle: Type 3 or Type 4) <input type="checkbox"/> Metals (check individual below) <input type="checkbox"/> RCRA TCLP-Metals* (check individual below)					
						<b>Dissolved Metals</b> <input type="checkbox"/> Arsenic <input type="checkbox"/> Barium <input type="checkbox"/> Boron <input type="checkbox"/> Cadmium <input type="checkbox"/> Chromium <input type="checkbox"/> Calcium <input type="checkbox"/> Copper <input type="checkbox"/> Iron <input type="checkbox"/> Mercury <input type="checkbox"/> Lead <input type="checkbox"/> Magnesium <input type="checkbox"/> Manganese <input type="checkbox"/> Nickel <input type="checkbox"/> Potassium <input type="checkbox"/> Selenium <input type="checkbox"/> Silver <input type="checkbox"/> Sodium <input type="checkbox"/> Zinc			<b>Total Metals</b> <input type="checkbox"/> Aluminum <input type="checkbox"/> Antimony <input type="checkbox"/> Arsenic <input type="checkbox"/> Barium <input type="checkbox"/> Beryllium <input type="checkbox"/> Cadmium <input type="checkbox"/> Chromium <input type="checkbox"/> Cobalt <input type="checkbox"/> Copper <input type="checkbox"/> Iron <input type="checkbox"/> Lead <input type="checkbox"/> Lead <input type="checkbox"/> Manganese <input type="checkbox"/> Mercury <input type="checkbox"/> Molybdenum <input type="checkbox"/> Nickel <input type="checkbox"/> Selenium <input type="checkbox"/> Silver <input type="checkbox"/> Vanadium <input type="checkbox"/> Thallium <input type="checkbox"/> Zinc		
						<b>ENVIRONMENTAL MICROBIOLOGY</b> <input type="checkbox"/> Aeromonas <input type="checkbox"/> Cryptosporidium and Giardia field turbidity _____ time start filtering _____ time end filtering _____ total volume filtered _____			<input type="checkbox"/> HPC <input type="checkbox"/> Legionella <input type="checkbox"/> Total, Fecal Coliform (Surface Water, Type 6) <input type="checkbox"/> Enterococcus (Type 9) <input type="checkbox"/> Total Coliform, Fecal Coliform (E. coli) <input type="checkbox"/> Culinary, Finished Water <input type="checkbox"/> Pool, Spa <input type="checkbox"/> Raw, Untreated <input type="checkbox"/> RO, Deionized, Reagent <input type="checkbox"/> Routine <input type="checkbox"/> Repeat lab# _____ date: _____ <input type="checkbox"/> Health Department Investigative <input type="checkbox"/> Private Investigative (no official record)		

\*indicates tests that require pre-analysis scheduling at 801-883-4655

## WATER BACTERIOLOGICAL ANALYSIS TEST REQUEST FORM

UTAH STATE PUBLIC HEALTH LAB, 46 N MEDICAL DR., SLC, UT 84113-1105, (801) 584-8400, FAX 584-8486

PLEASE USE A BALL POINT PEN AND PRINT CLEARLY WHEN COMPLETING THE FORM

SYSTEM #:	SYSTEM NAME:	<b>FOR LABORATORY USE ONLY</b> LAB#		RECEIVED DATE/TIME STAMP
SAMPLING POINT DESCRIPTION:				
COLLECTED BY:		TEMPERATURE:	CONDITION: ICE / NO ICE	
COLLECTION DATE AND TIME (24 HOUR CLOCK):		<b>SAMPLE NOT ANALYZED / SUBMIT NEW SAMPLE</b>		
<b>TYPE OF SAMPLE</b>		<input type="checkbox"/> EXCEEDED HOLDING TIME (Over 30 hrs from collection to lab receipt) <input type="checkbox"/> COLLECTION DATE AND TIME NOT RECORDED <input type="checkbox"/> FROZEN <input type="checkbox"/> LEAKED <input type="checkbox"/> NOT STATE LAB CONTAINER <input type="checkbox"/> OTHER _____		
<b>TYPE OF PROCESSING</b>		<b>CONTACT INFORMATION</b>		
<input type="checkbox"/> ROUTINE <input type="checkbox"/> REPEAT LAB#: _____ DATE: _____ <input type="checkbox"/> HEALTH DEPARTMENT INVESTIGATIVE <input type="checkbox"/> PRIVATE INVESTIGATIVE (NOT FOR OFFICIAL RECORDS)		State Laboratory - Environmental Microbiology (801) 584-8400 State Division of Drinking Water (801) 536-4200 Contact Your Local Health Department for Pool, Spa, and Hot Tub Information		
<b>REPORTING INFORMATION</b>		<b>BILLING INFORMATION</b>		
NAME: ADDRESS: CITY: STATE/ZIP: PHONE: FAX: EMAIL:		NAME: ADDRESS: CITY: STATE/ ZIP: PHONE: FAX:		

## WATER BACTERIOLOGICAL ANALYSIS TEST REQUEST FORM

UTAH STATE PUBLIC HEALTH LAB, 46 N MEDICAL DR., SLC, UT 84113-1105, (801) 584-8400, FAX 584-8486

PLEASE USE A BALL POINT PEN AND PRINT CLEARLY WHEN COMPLETING THE FORM

SYSTEM #:	SYSTEM NAME:	<b>FOR LABORATORY USE ONLY</b> LAB#		RECEIVED DATE/TIME STAMP
SAMPLING POINT DESCRIPTION:				
COLLECTED BY:		TEMPERATURE:	CONDITION: ICE / NO ICE	
COLLECTION DATE AND TIME (24 HOUR CLOCK):		<b>SAMPLE NOT ANALYZED / SUBMIT NEW SAMPLE</b>		
<b>TYPE OF SAMPLE</b>		<input type="checkbox"/> EXCEEDED HOLDING TIME (Over 30 hrs from collection to lab receipt) <input type="checkbox"/> COLLECTION DATE AND TIME NOT RECORDED <input type="checkbox"/> FROZEN <input type="checkbox"/> LEAKED <input type="checkbox"/> NOT STATE LAB CONTAINER <input type="checkbox"/> OTHER _____		
<b>TYPE OF PROCESSING</b>		<b>CONTACT INFORMATION</b>		
<input type="checkbox"/> ROUTINE <input type="checkbox"/> REPEAT LAB#: _____ DATE: _____ <input type="checkbox"/> HEALTH DEPARTMENT INVESTIGATIVE <input type="checkbox"/> PRIVATE INVESTIGATIVE (NOT FOR OFFICIAL RECORDS)		State Laboratory - Environmental Microbiology (801) 584-8400 State Division of Drinking Water (801) 536-4200 Contact Your Local Health Department for Pool, Spa, and Hot Tub Information		
<b>REPORTING INFORMATION</b>		<b>BILLING INFORMATION</b>		
NAME: ADDRESS: CITY: STATE/ZIP: PHONE: FAX: EMAIL:		NAME: ADDRESS: CITY: STATE/ ZIP: PHONE: FAX:		

Pool/ Spa/ Hot tub samples will have a colilert test and a heterotrophic plate count performed on each sample. All other samples will have only a colilert test performed unless specified in "other". The colilert test consists of coliform and *E. coli* analysis.

#### INSTRUCTIONS FOR COLLECTING WATER SAMPLES

1. Do not rinse bottle or touch the lip of bottle.
2. Use only approved containers.
3. Return sample to lab within 24 hours of collection and refrigerate or hold on ice until delivery, also do not allow to freeze. Preferably hold sample at less than 10 degrees Celsius (50 degrees Fahrenheit).
4. Collect sample by removing aerator from tap and letting water run for 2-3 minutes. Fill bottle above the the 100 mL line
5. If collecting sample from lake, pond, or type of source water, submerge the bottle, forcing it forward with an even slow motion
6. Select sampling point that will be representative of the system being tested
7. Fill out test request form completely.

#### STATE OF UTAH COLIFORM REGULATIONS (FOR DRINKING WATER ONLY)

##### For routine sample which are total coliform positive

1. System must collect the number of repeat samples indicated below for each total coliform positive result

Population	# of repeat samples
25-1,000	4
>1,000	3

2. The repeat samples must taken within 24 hours of the original positive sample and the repeat test request must indicate the lab number and date of the original positive sample. Specific locations of repeat samples are as follows:

- a. within 5 service connections upstream
- b. within 5 service connections downstream
- c. at the original sample site

3. Additional samples are required for the next month's sampling. The number of additional samples are as follows

Population	# of routine	# of additional samples
25-1,000	1	4
1,000-2,500	2	3
2,500-3,300	3	2
3,300-4,100	4	1
>4,100	5 or more	none

##### For *E. coli* positive samples and repeat samples resulting in total coliform positive

1. If either the original routine sample or any of the repeat samples are fecal coliform positive for *E. coli*, an acute violation has occurred and public notice is required within 72 hours.
2. If both the original routine sample and all repeat samples are total coliform positive, a non-acute violation has occurred and public notice is required within 14 days

Pool/ Spa/ Hot tub samples will have a colilert test and a heterotrophic plate count performed on each sample. All other samples will have only a colilert test performed unless specified in "other". The colilert test consists of coliform and *E. coli* analysis.

#### INSTRUCTIONS FOR COLLECTING WATER SAMPLES

1. Do not rinse bottle or touch the lip of bottle.
2. Use only approved containers.
3. Return sample to lab within 24 hours of collection and refrigerate or hold on ice until delivery, also do not allow to freeze. Preferably hold sample at less than 10 degrees Celsius (50 degrees Fahrenheit).
4. Collect sample by removing aerator from tap and letting water run for 2-3 minutes. Fill bottle above the the 100 mL line
5. If collecting sample from lake, pond, or type of source water, submerge the bottle, forcing it forward with an even slow motion
6. Select sampling point that will be representative of the system being tested
7. Fill out test request form completely.

#### STATE OF UTAH COLIFORM REGULATIONS (FOR DRINKING WATER ONLY)

##### For routine sample which are total coliform positive

1. System must collect the number of repeat samples indicated below for each total coliform positive result

Population	# of repeat samples
25-1,000	4
>1,000	3

2. The repeat samples must taken within 24 hours of the original positive sample and the repeat test request must indicate the lab number and date of the original positive sample. Specific locations of repeat samples are as follows:

- a. within 5 service connections upstream
- b. within 5 service connections downstream
- c. at the original sample site

3. Additional samples are required for the next month's sampling. The number of additional samples are as follows

Population	# of routine	# of additional samples
25-1,000	1	4
1,000-2,500	2	3
2,500-3,300	3	2
3,300-4,100	4	1
>4,100	5 or more	none

##### For *E. coli* positive samples and repeat samples resulting in total coliform positive

1. If either the original routine sample or any of the repeat samples are fecal coliform positive for *E. coli*, an acute violation has occurred and public notice is required within 72 hours.
2. If both the original routine sample and all repeat samples are total coliform positive, a non-acute violation has occurred and public notice is required within 14 days





# Utah

## Department of Health

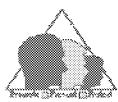
### Bureau of Chemical and Environmental Services

46 North Medical Drive, Salt Lake City, UT 84113-1105

Phone 801-584-8400 Fax 801-584-8251

URL <http://health.utah.gov/els/envsry>

- Hand delivered
  - Shipped samples
  - Cooler returned



Utah  
Department of Health  
Bureau of Chemical and Environmental Services

46 North Medical Drive, Salt Lake City, UT 84113-1105

Phone 801-883-4655 Fax 801-584-8251

URL <http://health.utah.gov/els/envsrv>

# CHAIN OF CUSTODY

- Hand delivered
- Shipped samples
- Cooler returned

System/Agency Name:		System/Agency Number:		Cost/Project Code:	REQUESTED TESTS					Received Date and Time:			
REPORTING/CONTACT		BILLING (list if different)									Sample Receipt Conditions		
Attn: _____ Address: _____ City, State, ZIP: _____ Phone: _____ Fax: _____ Email: _____ Submitted by: _____		Special code: _____ Attn: _____ Address: _____ City, State, ZIP: _____ Phone: _____ Fax: _____									COOLANT / NO COOLANT Yes No <input type="checkbox"/> Documentation complete <input type="checkbox"/> Temperature within-range <input type="checkbox"/> Within holding time <input type="checkbox"/> Proper containers and in-date <input type="checkbox"/> Containers intact <input type="checkbox"/> Acceptable pH <input type="checkbox"/> N/A <input type="checkbox"/> Custody seals intact		
COLLECTION POINT DESCRIPTION		COLLECTED BY (initials)	COLLECTED DATE (mm/dd/yy)	COLLECTED TIME (24 hour)	COMMENTS						Receipt temperature	Receipt pH	LAB NUMBER

Dispatched by:	Date and Time:	Courier Company Name:	Invoice/Airbill #:
Relinquished by	Date and Time:	Received by:	Date and Time:
Relinquished to DLS by:	Date and Time:	Received to DLS by:	Date and Time: